

# MILITARY ILLUSTRATED

PAST & PRESENT

French Infantry  
at Austerlitz

German Grenades  
1914-18

British Mounted  
Infantry Uniforms,  
1870s-1903

No. 15  
October/November 1988

£2.25

SA80  
On Parade

London Trained  
Bands, 1588

Kiffin Y.  
Rockwell,  
1914-16

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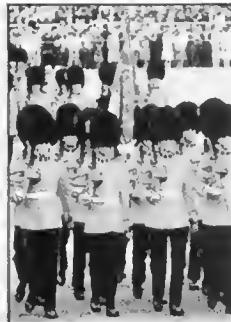
# MILITARY ILLUSTRATED

## □ PAST & PRESENT □

No. 15

ISSN 0268-8328

OCTOBER/NOVEMBER 1988



Our cover illustration shows the Escort for the Colour, 1st Bn Irish Guards, at the Queen's Birthday Parade, 11 June 1988 — see p.37

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Editorial design by  
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Editorial address:  
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# EDITORIAL

Our only 'first timer' in this issue is EWW Fowler. Will Fowler, born in Somerset in 1947, holds a Cambridge arts degree; a Diploma in Journalism Studies from University College, Cardiff, where he studied under the legendary Tom Hopkinson, one-time editor of *Picture Post*; and is an Associate of the Institute of Explosives Engineers. He joined the Territorial Army as a rifleman in 4RG in 1973, was promoted from the ranks, and is currently a company commander. Will is the author of Osprey Men-at-Arms books on the Falklands land battle and the Royal Marines 1956-82, among a number of other books and many articles. Since 1983 he has been Army Editor of *Defence* magazine; as a defence journalist he has visited operational areas, exercises and defence exhibitions in Europe, the Middle East and the Far East.

## Rutland County Museum

We are asked to note the opening of this museum's new exhibition on



Will Fowler

'The Volunteer Soldier in Leicestershire and Rutland'. The museum, in Catmose St., Oakham, Rutland, is open Tues - Sat 10am - 1pm, 2pm - 5pm, and Sun (April - October) 2pm - 5pm.

## 'El Dorado'

Terry Hooker, of 27 Hallgate, Cottenham, North Humberside HU16 4DN sends us the first issue of *El Dorado*, a newsletter devoted to Latin American and Caribbean military uniforms, organisation and history. This is available from him bi-monthly

(No. 1, May 1988) at 60p P&P 20p UK, 42p overseas surface, 65p USA Airmail; subscriptions £4.50 UK, £5.62 overseas surface. The first newsletter runs to nine pages; it includes a facsimile of an establishment list for the units of Maximilian's Mexican army, 1865; line schematics of ten uniforms, with colour notes, from the Viceroyalty of the River Plate, 1744-95; 16 ditto from the Army of Gran Colombia, 1814-26; and similar treatments of nine unit patches of the modern Brazilian Army.

## Errata

On p.15, 'MI' No. 14, line 23 of the caption, for 'William Allen' read 'William Lewis'.

## Revolutionary video

The response to our advertisements in issues of last winter for the video cassette recording the visit to the UK last August of the superb 're-enactors' of the American Revolutionary War groups from the USA, Canada and Germany has been such that further copies are now being made available: see coupon in our Classified section opposite.

escape; and Rutger Hauer plays 'Sasha' Pechersky, a Russian soldier instrumental in its success. Director Gold and scriptwriter Richard Rose well convey much of the horror described in the book without descending into cheap sensationalism. The killing of the SS guards before the escape is handled with considerable tension; and the final mass break-out, hindered by barbed wire and land mines and carried out under machine gun fire, forms an exciting climax.

The latest release in After the Battle's excellent series of Second World War documentaries is *Theirs is the Glory* (1946), telling the story of the Arnhem operation. Financed by the Rank Organisation and conceived as a drama-documentary blending news-reel footage with re-enactment, it was directed (uncredited) by Brian Desmond-Hurst, whose earlier war movies had included *The Lion Has Wings* (1939) and *Dangerous Moonlight* (1941) and who later directed *Malta Story* (1953).

The film is of particular interest in being made within months of the events depicted, using correct locations as far as possible; and all the acted parts were played by people who had actually been involved in the operation. Some, indeed, such as Maj. C.F.H. 'Freddie' Gough, were only recently liberated PoWs. This lack of professional actors sometimes proves a handicap in dialogue scenes, but otherwise adds to the documentary atmosphere. The action scenes, staged with live ammunition, are often hard to distinguish from the archive material; and vehicle enthusiasts will enjoy seeing actual examples of German armour, e.g. original Panther and Tiger tanks, being deployed.

Being made so soon after the event, the film highlights the bravery of the participants rather than questioning the wisdom of the operation or allocating blame for its failure. It remains, however, a unique piece of film history, which soberly explains the course of events without recourse to irrelevant melodrama or tasteless jingoism.

Recent releases in GMH Entertainments' *Visions of War* series include four excellent documentary films. *The War in the Desert - Tunisian Victory* is the famous 1944 documentary made by British and American Service Film Units, co-directed by Roy Boulting and Frank Capra. *The Battle for Cassino* and *The Battle for the Bulge*, produced and directed by Peter Batty in 1969, blend archive footage with interviews and specially shot material. *Burma - Railway of Death*, produced and directed by David Bilton for Film Victoria, follows a similar format and includes interviews predominantly with Australian survivors. Interested readers should contact GMH Entertainments, 22 Manasty Rd., Orton Southgate, Peterborough PE20UP.

Stephen J. Greenhill

## ON THE SCREEN

main characters in both halves of the film. Nonetheless, right from the opening image of recruits having their hair shorn like so many sheep, the film remains a powerful statement of the dehumanising effect of war.

*Napoleon and Josephine - A Love Story* is a three-part mini-series lasting some four and a half hours. It begins in 1794, with the rising young artillery officer introduced to the aristocratic Creole who has barely escaped the guillotine. The story ends with Napoleon's abdication in 1814.

Bedrooms are more in evidence than battlefields, but some time is spent on campaigns, particularly those in northern Italy and Egypt. The former uses footage appropriated from two Dino de Laurentiis productions, *War and Peace* (1956) and *Waterloo* (1971), shamelessly out of context and badly matched with newly shot close-ups of small numbers of extras. The Egyptian campaign, filmed in Morocco, is handled with greater consistency.

Armand Assante bears a remarkable physical resemblance to the young Napoleon, a part he had previously played in a Broadway production called *Kingdoms*; though Jacqueline Bisset's natural beauty probably does more than justice to the historical Josephine de Beauharnais, who was apparently plain and had bad teeth. American accents grate in some supporting roles, though Anthony Perkins conveys well the wily politician Talleyrand. The production benefits from dazzling costumes and French locations but, as light entertainment, cannot be relied upon for accuracy.

Sobibor, one of the three Nazi extermination camps built in eastern

Poland, was the site of the murder of some 250,000 Jews during its 18-month existence; but it was also the scene of what was arguably the biggest mass break-out from any place of imprisonment during the Second World War. About 450 of the 600 Jews who worked in the camp attempted to escape, of whom over 300 were successful. The incident was considered serious enough for Himmler to order the removal of all evidence of the camp's existence. The story of the escape and its aftermath was well documented in Richard Rashke's book *Escape from Sobibor*, written after extensive research and interviews with many of the survivors. This was adapted into a TV movie made by Zenith Productions for Central Television, directed by Jack Gold.

For the production a full-scale replica of the camp was built near Belgrade in Yugoslavia; about 700 local extras were employed, and three survivors acted as historical consultants. Alan Arkin plays Leon Felhendler, the original architect of the



Armand Assante plays the young Gen. Buonaparte in 'Napoleon and Josephine - A Love Story'.



# LETTERS

We will be glad to publish readers' letters which advance the information given in our articles; and to pass on to contributors queries more suitably dealt with by private correspondence. We reserve the right to select, for reasons of space, only the most relevant passages for publication. Please address letters to our editorial box number, given on page 3, and mark envelope 'Letters'.

## Caton Woodville

I was very pleased to see the article on this artist in your magazine ('*MI*' Nos. 11, 13). My interest is personal, for he was my grandfather, and I was brought up hearing of his wonderful pictures. It is ironic that such an article should come from the other side of the Atlantic, where they would be more familiar with his father — also Richard Caton Woodville — who had, in his time, a very high reputation in America.

RCW senior was born in Baltimore on 13 April 1825. His father, William, had been in the spice trade in Liverpool, moving to Maryland where he married Elizabeth Ogle on 27 June 1822. They had five children: RCW snr., William, Mydleton Lloyd, and two girls. Mydleton moved south and later served in the Confederate army.

It had been intended that RCW snr. would study medicine; though he must have changed his mind, he mar-

ried Mary T. Buckler, daughter of a prominent doctor. Their son Henry (b. Dusseldorf, 1845; d. New Mexico, 1893) did become a doctor. A daughter, Elizabeth, died unmarried in 1927. It was in Dusseldorf that RCW snr. met his second wife, Antoinetta Schnitzler; after his divorce they married in London in 1854. RCW snr. continued to work in Dusseldorf, making trips back to the USA to obtain material which he worked up into pictures in Germany. He died in London in August 1855 from an accidental morphia overdose, his son, RCW jr. being born five months after his death. His fame is thus based upon a very short working life. His first known, and only military painting, 'Scene with a dying general' dated 1836, is an incredible piece of work for an 11-year-old.

Moving forward past the next generation, covered in Mr. Canning's articles on RCW jr. — he had two sons: Anthony (1878-1957) and William (1884-1962). Both had artistic training, but neither reached the higher ranks of the art world. Anthony, my father, studied under Hubert von Herkomer at Bushey, but subsequently went on to the stage. He returned to this after war service 1915-18, and a spell running a photographic studio in Knightsbridge. He made caricatures, and later some stage scenery designs for the Q Theatre at Kew Bridge.

On the point of small errors creeping into the work of a professional illustrator working at speed: my

father recalled watching RCW jr. painting a man in armour, finishing off the rivets more hastily than he should. When my father pointed out to him that the last rivet would have locked the knee-joint solid, he was not popular for the rest of the day.

Humphrey Caton Woodville

Orwell, Royston, Herts.

## Polish paratroopers

Having just read Krzysztof Barbarski's excellent article on the 1st Polish Independent Parachute Bde. ('*MI*' No.12), I would just like to comment on the photographs captioned as showing the 'Jacket, Parachutists, 1942 Pattern' on pp. 25 & 26. This may actually be a Polish design that was the forerunner of the 1942 oversmock. A careful look reveals differences: the elasticized pockets at the bottom of the oversmock are missing, but zippered 'slash' pockets are visible on p.26; the cut of the garment around the legs appears to be different, and the central zipper does not carry on for an inch past the bottom, as on the regular versions of the oversmock.

W.E. Starey

Petawawa, Ont. Canada

The musical instrument referred to as a 'Jingling Johnnie' ('*MI*' No.13, p.19) is in fact a xylophone — sometimes called a *glockenspiel*, although strictly speaking it is not. A 'Jingling Johnnie' is a staff with a cow-horn crosspiece festooned with bells.

B. Rowland

Wimborne, Dorset

(Both these errors are the responsibility of the editor rather than the author. Ed.)

## Lasalle

With regard to the article on Gen. Lasalle in '*MI*' No.7 the quotations given should have been identified as coming from the second source noted at the end: *Napoleon's Cavalry and Its Leaders*, by David Johnson (London, 1978).

'Volunteer'

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# German Grenades and Bombing Tactics, 1918 (1)

STEPHEN BULL  
Paintings by PAUL HANNON

It is generally accepted that in the early part of the Great War the German Army was better equipped with grenades than its enemies<sup>(1)</sup>. What is not so well appreciated is the diversity of types available, and the tactics by which they were employed in combat. Some of these tactics, though described by different names, show surprising similarities with their British equivalents<sup>(2)</sup>. In this first article the grenade types are described and illustrated.

**GRENADES  
AVAILABLE IN 1914**

The three basic types of grenade available to the German soldier at the outbreak of war and in the first year of fighting were the time-fused hand grenade; the percussion hand grenade; and the rodded rifle grenade.

The time-fused type was the *Kügelhandgranate* (lit., 'ball hand grenade') *Modell 1913*. This had much in common with the classic bombs of earlier times, being a cast iron sphere about 3in. in diameter, weighing 1lb. 10oz. It was segmented on the outside, and fitted with a brass fuze inserted through a screw-threaded hole in the top. A pull on the wire loop of the fuze, often by means of a hook carried on a leather wrist strap, moved a friction bar over a friction composition inside the fuze, and lit it. After 7 seconds the train of powder reached and detonated the main charge. No separate detonator was necessary with the type of powder used; this made it a little less powerful than modern high explosives, but time and expense were spared in manufacture. As a safety precaution the *Kügelhandgranate* was usually fitted with a closing plug when in transit, and the lighter was only inserted in or near the front lines<sup>(3)</sup>.

The other hand grenade was the *Diskushandgranate*. This was a percussion, explode-on-impact type. The body of the bomb was composed of an oyster- or crab-

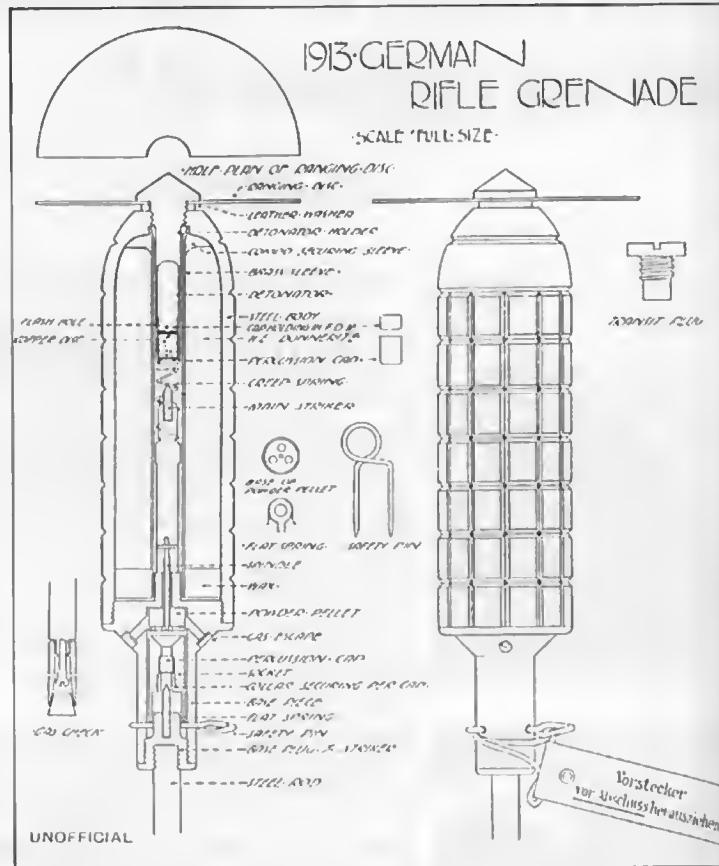
like iron shell with six small projections around the outside rim. Inside were two circular bags of explosive, and the detonator mechanism. The latter was a star-shaped arrangement with a central four-pointed striker. Removal of a safety pin and cap allowed a safety pellet to move, exposing the striker. Any sudden impact would now cause one of the four striker pellets to hit the striker, causing the detonator to set off the main charge<sup>(4)</sup>. The bomb weighed 13oz., and was thrown in a vertical plane to give the best chance of detonation.

## Rifle grenades

There were two versions of the rodded rifle grenade, pat-



ters 1913 and 1914. Both were percussion weapons, both weighed about 2lb., and the method of firing was the same in both cases. The standard *Gewehr 98* rifle was usu-

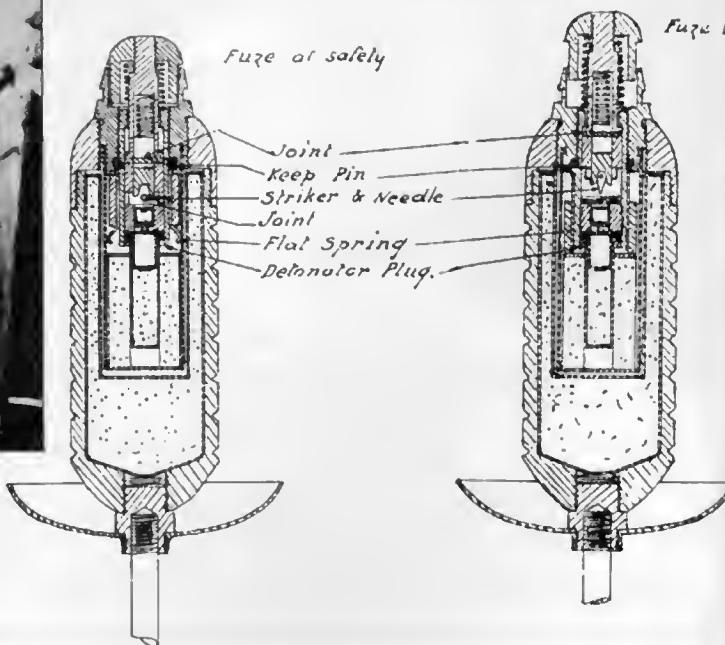


**Above:**  
The 1913 pattern rifle grenade, as drawn by G.W. Jackson in 1917. (Imperial War Museum collection, with particular thanks to Mike Hibberd)

**Below left:**  
German infantryman posing for his trench portrait with gasmask, and an early example of the stick grenade, c.1915. Note its rounded handle-end. He retains the obsolete personal equipment with single large cartridge boxes. (Author's collection)

**Below:**  
The 1914 pattern rifle grenade.  
(From British, French and German Grenades, 1915)

RIFLE GRENADE. 1914



ally used for launching<sup>(5)</sup>; the rifle was loaded with a blank cartridge and the rod of the grenade was slid down the barrel, the rifle then being fired from a rested or grounded position.

Though they were similar in purpose, the detailed mechanisms of the *Modell 1913* and *1914* were actually quite different. In the former, there was a curious arrangement by which the removal of a safety pin allowed a cap to ignite a powder pellet on discharge. Only when the powder pellet was burnt away could the main charge be set off by means of a striker hitting a detonator. Range could be altered not only by changing the angle of the rifle, but by the presence or absence of a ranging disc which could be applied to the nose of the bomb. When in place this disrupted the airflow over the otherwise streamlined missile, thus shortening the range.

In the *1914* pattern the striker was held by a locking ball system controlled by a ring which set back when the rifle was discharged. Once this ring was disengaged the fuze was free to move forward in the body of the bomb, and a striker needle moved into a vertical position ready to hit the detonator. The *1914* pattern was also capable of having a ranging disc fitted, though in this case it was of dished shape, and fitted between the rod and the head of the bomb. It could be fitted either way up, to give a total of three possible range settings<sup>(6)</sup>.

Accuracy of fire from these rifle grenades was low, and the recoil considerable. Matters were improved by mounting the rifle in a fixed stand, placed singly or in pairs at strategic points along the trench. The standard pattern stand was an all-metal construction with a ramp-and-peg arrangement for range adjustment. A spring mounted either at the front or below the main frame helped to absorb the heavy recoil. The rifle trigger could also be released by means of a lanyard, allowing the oper-

ator to distance himself somewhat both from the recoil and from retaliatory fire. Most of these heavy stands were fitted to a metal bed-plate in which were fitted pull-out 'stretcher' handles for ease of carrying.

Though this paraphenalia was more cumbersome than most of the methods used by the British, it did have its compensations. The *1913* and *1914* rifle grenades were physically bigger than most of their counterparts, and with longer rods greater effect was possible to longer ranges<sup>(7)</sup>.

#### Secondary types

Apart from these main official patterns, several other types were in use as early as winter *1914/15*. Special purpose chemical bombs for asphyxiation or incendiary attack also existed, and these were usually identifiable by their spherical tin cases<sup>(8)</sup>. In

addition, there were emergency or improvised grenades made in or near the front lines, and these were often similar to those employed by British and French troops. The German soldiers thus had their own versions of the 'jam tin' and 'hairbrush' or 'racket' bombs. The former were explosives packed into tin cans, the latter slabs of gun-cotton wired to wooden handles. Both were the direct result of shortages of the more regulation types; and it would seem that all armies of *1914* were to some extent caught unawares by the massive demand for bombs produced by the onset of trench warfare.

German improvised bombs were soon being replicated by home factories, incorporating

slightly more reliable methods of lighting. Three such versions were noted by the British, which they dubbed 'Hairbrush Grenade with Spring Igniter', 'Grenade with Spring Igniter', and 'Small Tin Grenade'. The 'spring igniter' was simply a metal tube containing a spring and striker held in place by a pin. Removal of the pin allowed the striker to snap forward and hit a percussion cap which initiated the fuze. In the 'Small Tin Grenade' the lighter was even simpler: a tube closed at one end by a ball of red phosphorus covered with oiled paper. The paper was torn off, the match head rubbed over a rough surface to light it, and the grenade thrown.



#### Below:

*German junior officer with Gewehr '98 on a grenade launching stand, c. 1915. Clearly visible are the recoil spring, this time at the front, and the elevating arc and pin. He holds in his hand a 1914 pattern rifle grenade — for understandable reasons, not yet fuzed. (Author's collection)*



## THE NEW BOMBS OF 1915

During the course of 1915 great efforts were made to catch up with the massive demand, and several new types made their appearance. Two of these were cheaper versions of existing designs.

The *Kügelhandgranate* 1915 was very much like the original, and apart from the use of new types of fuze the only visible difference was the simpler pattern of the casing. The *Diskushandgranate Modell 1915* was also similar to its predecessor. Importantly, however, the outer casing was in sheet steel, and it was larger, weighing 15oz. It was intended primarily as an offensive grenade, the main effect being the local impact of blast. The original *Diskushandgranate* and the two main patterns of *Kügelhandgranate* were by contrast mainly for defensive use, a larger area being covered by the fragments from their cast iron casings. It was therefore desirable to throw the ball and early discus bombs from cover, so that there was no risk to the grenadier<sup>(9)</sup>.

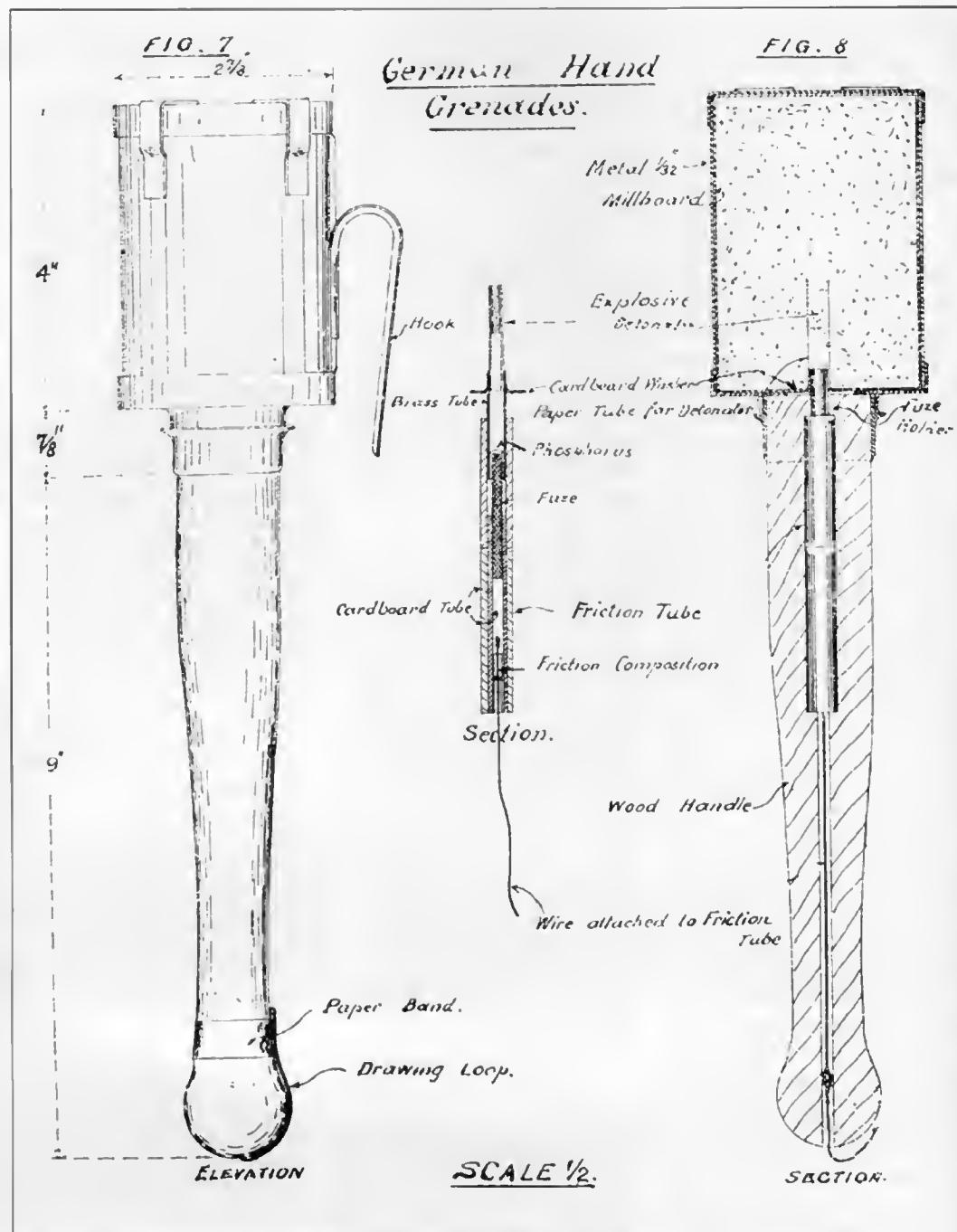
Another type in use in 1915 was the somewhat bizarre parachute percussion bomb, sometimes known as the *Aasen* grenade after its Danish inventor. The main components were a handle, a rounded metal head with a nose buffer, a parachute skirt, and a 7m length of cord. The thrower attached the cord to his hand or wrist and threw the grenade well up into the air. At the full extent of the cord a safety needle was jerked free, arming the bomb, which then descended nose-first, and was set off by impact<sup>(10)</sup>.

### Above:

The early-pattern *Stielhandgranate* with rounded handle and separately clamped lid. (From British, French and German Grenades, 1915)

### Right:

Two examples of the 1915 *Stielhandgranate* flank a *Diskushandgranate*, a *Kügelhandgranate*, and two 'jam tin bombs'. (Paul Hannon)



### The *Stielhandgranate*

Probably the most important development of 1915 was the *Stielhandgranate* or 'stick grenade'. This is doubtless the best-known of all German grenade types, and soon became standard, though it was never the only type in use. It is noteworthy that there were several different patterns of stick grenade.

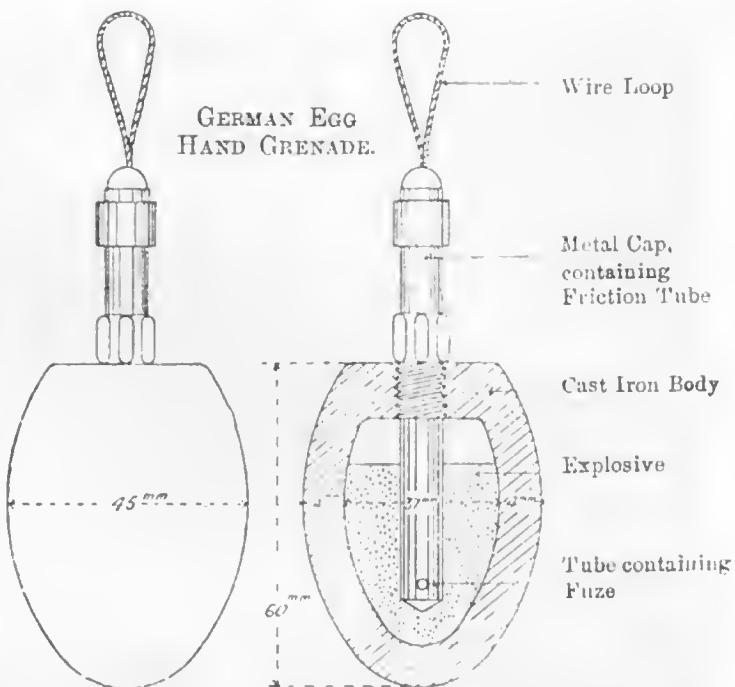
By far the commonest was the *Stielhandgranate B.Z.*, which British Intelligence described as 'Cylindrical Hand Grenade with handle and Time Fuze, Regulation Type'. In the earliest versions this was a tin cylinder 4in. long and nearly 3in. in diameter, with a lid held in place by

four clips. A screw-threaded hole allowed the fitting of a wooden handle, and on the side of the cylinder a flat hook was provided for hanging the grenade on a belt. The handle had a bulbous, rounded end, and was hollow-bored; a cord projected from the end, and was taped down to it by a paper band. On the head section was stencilled 'Vor Gebrauch Sprengkapsel Einsetzen' — 'Before use insert the detonator'.

Once the detonator was in place, the throwing sequence was as follows. Holding the stick in the right hand, the grenadier tore away the paper band securing the cord with his left. The cord was then pulled sharply; this pulled a wire in a friction tube, thus

lighting the main fuze. After a delay of  $5\frac{1}{2}$  seconds the detonator went off, exploding the main charge. The duration of the fuze was stamped into the wooden handle; occasionally, 7-second fuzes are encountered. Other letters stamped here are usually the manufacturer's initials<sup>(11)</sup>.

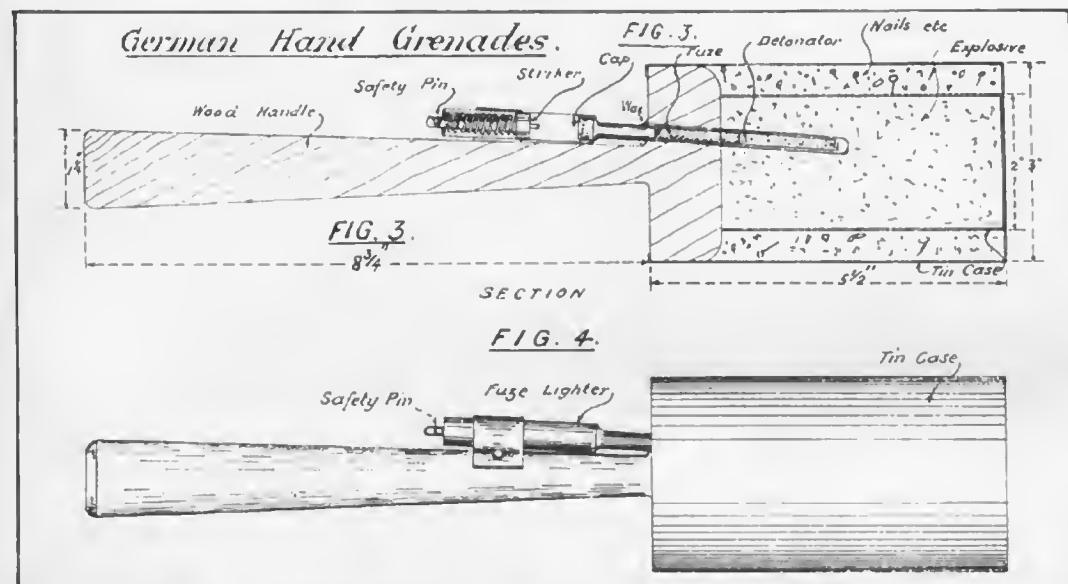
During 1916 and 1917 this basic pattern underwent several modifications. The first major change seems to have been in the cord and handle arrangement, which in its earliest configuration was vulnerable to damp and snagging. In later models the handle end was not rounded, but square-cut, and closed with a tin cap fitting on to a screw thread. Inside this cap was a porcelain button



Above:  
The Eierhandgranate as pictured in a British training manual.

Left:  
Cutaway and general arrangement drawings of the stick grenade with spring igniter, rather than time-fuze ignited by pull-cord, in this case the early version with external mechanism. (From British, French and German Grenades, 1915)

Below:  
Grenadier party in a shellhole, 1917. Both late-pattern stick grenades and disc grenades are visible; the dog wears a waistcoat with pockets for the latter. The man holding the dog clearly shows the shoulderstrap of the 90th Fusilier Regt.; the man at left foreground differs in having 'Swedish' cuffs, and the shoulderstrap numeral '3'. (Imperial War Museum)



attached to a cord, which dropped down ready to pull when the cap was unscrewed. Another significant modification was the making of the cylinder from one main stamping, doing away with the need for separate lids and clips. Towards the end of the war it also sometimes appeared without the belt hook.

The other main variant of the stick grenade was the 'Stiel' or 'Wilhelm's Handgranate A.Z.', designed to explode on impact. Basically these were equipped either with a striker pellet or with a spring striker which operated when the grenade hit the ground. In the earliest models a release lever and retaining bolt mechanism were located outside the stick handle<sup>(12)</sup>. In later versions the mechanism

was inside, sometimes with a long weighted sleeve to retain the striker, sometimes with an 'allways' ball and spring cover arrangement.

### RATIONALISATION IN 1916/17

During 1916 there were two important departures in German grenade production which, as we shall see, had important tactical implications. Most notable was the introduction of the 'Eierhandgranate' or 'egg grenade'. This was a black-painted ovoid of cast iron weighing about 11oz., with a screw-threaded hole at one end to accept the lighter. No detonator was required as the charge used was capable of being sent off directly by the lighter. In transit this lighter was replaced by a small metal plug

for safety; when in place, it was ignited by a pull on the wire loop or cord provided<sup>(13)</sup>.

The second development of 1916 was the discontinuation of the rodded rifle patterns. These were relatively complicated, relatively expensive, and not very accurate. By this time their rôle was beginning to be taken over by trench mortars and *Granatwerfer* bomb-throwers<sup>(14)</sup>. All efforts in the grenade field were now temporarily concentrated on two hand-thrown types: the stick and egg bombs.

In 1917 the old rodded rifle bombs were finally succeeded by a new rifle grenade, the *Modell 1917*. Unlike the 1913 and 1914 types this was launched from a discharger cup which fitted on to the muzzle of the service rifle. The bomb itself was a small cylinder shaped like a squat jam pot, with a hole vertically through the middle. Curiously, the grenade was launched by means of a bullet round, which passed through the channel momentarily trapping propulsive gas behind the bomb, and at the same time lighting the fuze<sup>(15)</sup>. In this respect the system was similar to that employed in the French 'VB' grenade and launcher, and unlike the British systems which used blank ballistic cartridges. MI

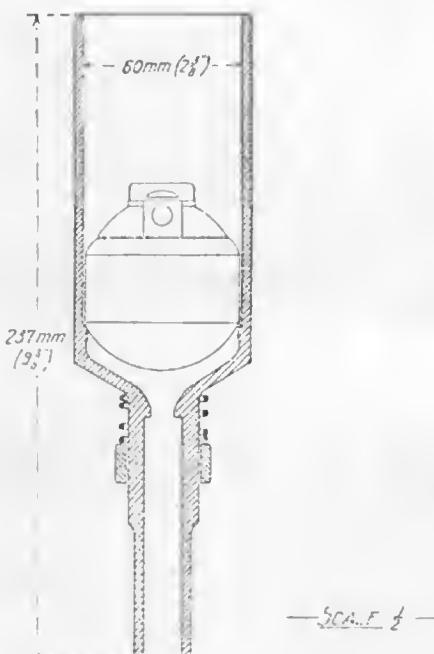
**To be continued:** Part 2 will detail the composition, equipment, fighting methods and evolution of German bombing squads.

#### Notes:

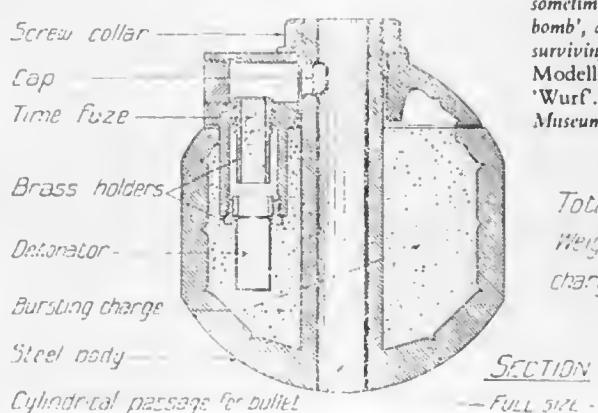
- (1) *History of the Ministry of Munitions*, Vol. XI, p.72 (London, 1920)
- (2) See 'British Grenade Tactics 1914-18', *Military Illustrated* No.7, pp.30-36.
- (3) *Notes on British, French and German Grenades*, pp.15-16 (September 1915)
- (4) *ibid.* pp.19-20
- (5) See John Walter, *The German Rifle*, pp.102-119 (London, 1974)
- (6) See also P. Delhomme, 'Les Grenades à Fusil Allemandes de la Grande Guerre', *Gazette des Armes*, pp.27-30
- (7) Such a stand appears in the display on trench warfare in the Imperial War Museum, London.
- (8) See note (3) above, pp.16-19; also *Text Book of Small Arms*, p.116 (London, 1929) and *The Training and Employment of Bombers*, pp.80-82 (1916).
- (9) *ibid.* pp.69-70, 111
- (10) See note (3), pp.20-21
- (11) *ibid.* p.18
- (12) *German Cylinder Hand Grenade with Handle (Peression)*, British General Staff Information Sheet, November 1916
- (13) *Text Book of Small Arms*, p.120
- (14) *Nahkampfmittel* (Berlin, 1917), English translation 'Weapons of Close Combat' (May 1917), *passim*
- (15) *New German Rifle Grenade*, British information sheet, 1918

#### Below:

The 1915 pattern Diskushandgranate, together with wooden boxes drilled to hold the striker pellets with which it was filled; these moved on any sharp impact, setting off the bomb. (Author's photograph)



*SECTION*  
showing grenade in cup ready to fire



Total weight - 15 1/2 oz  
Weight of bursting charge - 1 1/4 oz

*SECTION*  
- FULL SIZE -

British Intelligence diagrams of the 'New German Rifle Grenade', sometimes referred to as the 'jam pot bomb', and its discharger cup; and surviving examples of the actual Modell 1917 rifle grenade or 'Wurf'. (National Army Museum, and author's photograph)



**(1) Soldat, 10. Kompanie, III Bataillon, Reserve-Infanterie-Regiment 239; winter 1914.** This unit was one of 48 reserve regiments raised, largely from young Kriegsfreiwilliger volunteers and men of the Ersatz-Reserve, in August 1914. In the

line by October, they suffered heavy loss on such battlefields as the Yser and Langemark. This soldier wears the standard 1910 tunic with Brandenburg cuffs, red-piped field grey trousers, tan marching boots darkened by coats of dubbin, and the 1895 Pickelhaube, its cloth cover bearing 'R/239' in the green adopted on 15 August 1914. The bayonet knot indicates his company. The 1909 pattern pouches are supported by the bread-bag strap worn as a neck-halster. He is pulling the wire loop to light the fuse of a

Kügelhandgranate by means of the chain and hook attached to the basket-type spherical carrier.

**(2) Unteroffizier, Bavarian Reserve-Infanterie-Regiment 16; 1915.** This NCO of the unit in which Adolf Hitler served wears typical Sturmanzug — assault order — of the early war years. He wears a 1910 tunic with the corduroy trousers often seen among the Bavarians, and usually field grey though sometimes of other shades. The band of his Feldmütze is covered with a grey band for low visibility, though the Bavarian cockade is 'buttoned' through this. His equipment includes a Zeltbahn rolled in a horseshoe, with the 1910 messtin strapped to the rear; 1895 pattern pouches; two 70-round cot-

ton handoliers; a Gewehr 98, with muzzle-cover; the S98/05 sword bayonet; and the Discushandgranate.

**(3) Fusilier, Fusilier-Regiment 40; early 1916.** With his 1914 Feldrock he wears the steingrau trousers introduced in August 1914, covered here with cotton overtrousers. The 1895/15 Pickelhaube has its spike removed, and the 'rush-green' cover bears the conventional green regimental number. He wears the 1915 Gummimask, and its cloth belt carrier. His Gewehr 98 has a 1914 rifle grenade fitted; the slung bayonet is the S98/15. He carries a large number of 1915 stick grenades hooked to a chest strap, in preparation for a raid or assault.



# French Infantry at Austerlitz, 1805

PHILIP J. HAYTHORNTHWAITE  
Paintings by GERRY EMBLETON

The battle of Austerlitz on 2 December 1805 — 'The Battle of the Three Emperors' — was one of the tactical masterpieces of history, and established Napoleon's reputation as the foremost commander of his age. It was probably the high point of his entire military career.

Taking advantage of Napoleon's apparent weakness in having the bulk of his forces concentrated on the Channel coast, the Third Coalition (Austria, Russia, Britain and Sweden) planned an Austro-Russian advance towards the Rhine. To counter this threat, Napoleon broke up his Channel camps and marched east on 31 August 1805 at the head of the finest army he ever commanded — experienced and well trained, it was not yet diluted by the influx of conscripts which in later years replaced the casualties of successive campaigns. Following a series of almost unbroken successes, the morale of the army was exceptionally high, and Napoleon used it to devastating effect in the operations leading to Austerlitz.

Advancing on a wide front, and undiscovered by his opponents, Napoleon's forces crossed the Rhine on 26 September, swinging north and west in a wide arc to sever the communications of the Austrian army of the inept Gen. Karl Mack von Leiberich (1752-1828). Isolated from his supports,

deceived them into believing was his weakest part. As the Allied troops were deploying, Napoleon launched a counter-attack which split their centre and drove them from the field, a victory

which shattered the Allies and ended the war at a stroke. His first victory after the assumption of the imperial mantle, it confirmed Napoleon's reputation as a military genius, but was firmly built upon the

Mack surrendered at Ulm on 20 October: a stunning strategic victory by Napoleon, achieved without the necessity of a major battle, and costing Austria some 50,000 troops.

Napoleon pushed on to occupy Vienna and engage the second enemy army, that of the Russian Gen. Mikhail Kutuzov (1745-1813), which was accompanied by the Austrian Emperor Francis I and Czar Alexander I (hence 'the battle of three Emperors'). On 2 December, a few miles east of Brunn in Moldavia, the two forces met at Austerlitz.

Confident of victory, the larger Russo-Austrian army planned to 'pin' the French left, whilst the main assault drove towards Napoleon's right-centre, which he had



#### Above:

French infantry on campaign. Though dating from c.1800, this print by Bartsch after W. von Kobell shows the typical non-regulation campaign appearance of the French infantry.

#### Centre:

Fusilier, 8th Line: print after V. Huen from the Bucquoy series, showing (inset) the distinctive regimental turnback ornament.

#### Right:

Fusilier sergeant (left) and fusilier in campaign dress, 57th Line, showing their unique plumes. (Print after H. Boisselier).





**Above:**

Sapeur (pioneer) and fusilier drummer, 18th Line. The sapeurs were grenadier distinctions with their traditional apron, axe and beard. Musicians frequently had additional regimental distinctions, e.g. the sky-blue facings and orange lace in this case. (Print after H. Boisselier).

foundations of his magnificent army (which was to a considerable degree his own creation); but only at the cost of approximately one-eighth of the French *Grande Armée*, who fell at Austerlitz. Never again was Napoleon to command so matchless a force.

### THE INFANTRY REGIMENTS

The backbone of the French army were the infantry regiments, the successors of the *demi-brigades* of the Revolutionary Wars (the term 'regiment', eschewed because of its élitist connotation, had been reinstated on 24 September 1803). In August 1805 there were 87 Line Infantry regiments, usually of three battalions (occasionally four), with a field establishment of nominally around 1,100 per battalion; in practice many of the units in the 1805 cam-

paign could muster little more than one-third of this number. Each battalion comprised seven fusilier companies and two of 'élites', one each of *grenadiers* and *voltigeurs*, the latter being the battalion's light infantry.

The Light Infantry regiments were supposedly more adept at skirmish tactics than the Line, but in reality were hardly any different except in uniform and terminology, having *chasseurs* instead of *fusiliers* and *carabiniers* instead of *grenadiers*. They were distributed through the army as if they were in fact different from the Line, normally each division having one Light Infantry regiment. Only in I Corps was the distinction actually practiced, in which neither division had any light troops, but the 27th *Léger* (Light Infantry) was attached to the Corps as 'advance

**Below:**

Grenadier drummer in full dress; a further example of musicians' distinctions, in the yellow lace chevrons on the sleeves. (Print after Maurice Orange).



**Captions to colour plates:**

- A, B, C)** Grenadiers, winter campaign dress, 1805: (A) Grenadier, marching order, carrying the bearskin in a linen bag atop the knapsack. (B) Grenadier officer. (C) Grenadier, battle order, with his bicorne strapped to his knapsack. Prior to issue of the strap passing right round the pack in 1806 soldiers had to improvise stowage straps or cords. The canteen is one of many varieties. Note, beneath overalls, captured Hungarian breeches, and matching Hungarian ankle boots.
- d)** Bicorn of 4th Line, with orange 'ties'.
- e)** Grenadier's bicorne with old-style drooping plume.
- f)** Fusilier's bicorne, front and side.
- g)** Grenadier epaulette variations.
- h)** Voltigeur epaulette variations.
- i)** Variations on the grenadier bearskin, with regulation blue and red rear patches; the more common red with a white cross; red or white cords; and at right, a cap of the 57th Line with double white ruffles (after Boersch Collin).
- j)** Undress bonnet de police with 'stocking' extended; and, below, as worn, with in this case Light Infantry badge and tassel.
- K, L, M)** Infantrymen, campaign dress, 1805-06: (K) Fusilier, 8th Line, showing regimental turnback badge and cuff variation. (L) Fusilier, showing another cuff variation, and position of bayonet scabbard on pouch belt. (M) Chasseur, Light Infantry. Note sabre and bayonet in double frog; waterproof musket lock cover; and 1806-pattern lozenge shako plate — it has been suggested that some regiments anticipated the general introduction of these, but details are unclear.
- n)** Infantry coat of regulation pattern, apart from the old-fashioned flapless cuff.
- o)** Cuff variations: (left to right) private, regulation pattern apart from white-piped red flap instead of red-piped blue flap; corporal, regulation pattern, with double orange rank bars; sergeant, flapless style, single gold rank bar.
- p)** Varieties of turnback insignia.
- q)** Variations on the Light Infantry shako, with green ornaments for chasseurs and scarlet for carabiniers; note example with 1806 lozenge plate.
- r)** Chasseur's short-skirted Light Infantry coat, with variations of cuff design noted among regiments.

posed as follows:

1st Bu.: *carabinier* and one *chasseur* company from each of the 1st, 2nd and 3rd Bns., 28th *Léger*.

2nd Bu.: the same from the 1st, 2nd and 3rd Bns., 31st *Léger*.

continued on page 18

French Infantry  
1805-06







Carabinier, 17th Léger. Distinctions shown by the Boeswillwald Colln. include orange epaulette straps with scarlet 'crescent' and fringe, scarlet cuff flaps, white cap cords, a green tobacco pouch suspended from the sabre hilt, and blue overalls worn over white and sky blue striped stockings with low shoes.

#### Right:

French infantry entering Leipzig, 1806: an eyewitness print after C.G.H. Geissler. In the centre is a carabinier with white overalls and gaiters; extreme left is a fusilier of the 57th Line, who has red numerals '5' and '7' on the turnbacks, and a white fabric cartridge box cover bearing the regimental identity written in black.

## UNIFORMS

The French infantry uniform had evolved from the introduction of a universal uniform in 1793, officially devoid of regimental distinctions save for the number on the buttons. Countless varieties existed, however, partly through difficulties of supply, partly through the adoption of non-regulation items on campaign; and equally, through the individualism of many regiments, which took advantage of the less than comprehensive dress regulations to introduce untold minor distinctions, none of which were codified and which probably changed with successive re-clothing of the unit. Minor varieties were noted especially in the uniforms of élite companies, whose more



elaborate uniform emphasized their ostensibly superior status.

### Line infantry

The infantry coat (*habit à la française*) was dark blue with white lining, turnbacks and lapels piped red; red collar and cuffs piped white; blue cuff flaps and shoulder straps and horizontal pockets piped red; and brass buttons. Variations included red cuff flaps, or white flaps piped red; or even the retention of the earlier flapless cuff, with a line of white piping running up the cuff instead, as worn by the 8th Line perhaps as late as 1812. An order of 13 July 1805 noted that 'Many colonels have abolished the red piping on the lapels, others have made vertical pockets instead of the horizontal ones'.

Great variety was found in the design of turnback badges, including hearts, diamonds and stars in red or blue cloth, red grenades for *grenadiers*, and regimental devices including the 8th Line's red diamond bearing a white '8' and inner diamond, and the 48th's blue number '4' on one turnback and '8' on the other.

Netherwear consisted of a white, single-breasted, sleeved **waistcoat**, with red collar and cuffs for some regiments (yellow for *voltigeurs*); and white **breeches** with black knee-length **gaiters**. Many regiments used unofficial white gaiters for summer or parade, and off-white or grey linen for everyday use. On campaign it was common to wear loose **overalls**, beige, white or grey being the commonest colours, worn over or sometimes in place of the gaiters. A white **stock** was worn for ordinary dress, or black for parade and active service, but this was often replaced by a more comfortable cravat.

The **headdress** was a low bicorne hat, usually ornamented only with a tricolour cockade with yellow lace loop; the lace 'ties' which held the sides erect were usually black, but sometimes coloured red, popular with *grenadiers*. The 4th Line had orange ties (traditionally awarded for bravery at Arcola), and the 18th Line red, or yellow for *voltigeurs*. Short plumes were sometimes added to distinguish *grenadiers*, or to identify the battalion; on 21 June 1805

Gen. Vandamme ordered 'only round pompons and forbid the use of those as worn by the 57th, which place an undue strain on the hats and give generally a bad effect' — that regiment using carrot-shaped plumes to identify its battalions, in sky-blue, orange and *lie-de-vin* (the latter a violet shade, literally 'wine dregs').

**Grenadiers** wore scarlet epaulettes and were permitted to use fur caps, usually donned only for parade or combat. Made of bearskin (hence its name *ourson*) or goatskin, the cap had a brass front plate embossed with a grenade, and sometimes with regimental distinctions. (For example, the 45th had a '4' on one side of the grenade and '5' on the other; the 108th had a triangular plate with a grenade occupying the upper point, with '108' cut out below.) The cap's cloth rear patch (nicknamed *cul de singe* or 'monkey's backside') officially was quartered in red and blue, but was more usually red with a white lace cross. The cap had a scarlet plume at the left, above the cockade, and partially braided cords hanging in a 'raquette' at the right, often

red, but white cords were not uncommon (worn by the 3rd, 18th, 21st and 57th, for example). The 8th Line wore peaks on their *grenadier* caps. For ordinary dress, the *grenadiers* wore the bicorne with a red pompon or plume, the old drooping plume still being retained in some cases.

**Voltigeurs** usually wore a chamois or yellow collar, often piped red, and green or green-and-yellow epaulettes and pompons, with yellow horns on the turnbacks. The 64th's *voltigeurs* had red hat ties, green pompon with red tuft, red collar piped white, green epaulettes with red crescents, and '64' on the turnbacks. The 95th's in 1806 had green pompons with yellow tufts.

**Equipment** included a tanned calfskin knapsack carried on the back by buff-leather shoulder straps affixed by wooden toggles, and closed with two or three straps. Filled with spare clothing, cleaning equipment, two packs of cartridges, four days' biscuit and personal

impedimenta, it weighed around 15 to 20kg, not including mess-tin, cooking pot and spare headdress in a cover, fastened on the outside of the knapsack. The cartridge box was black leather, suspended at the right hip by a whitened buff-leather shoulder belt; the flap of the box carried a brass grenade or horn badge for élites, and occasionally the regimental number. *Fusiliers* carried the brown leather bayonet scabbard on the front of the cartridge box belt, but those armed with the sabre carried an additional belt over the right shoulder, with a combined frog for both sabre and bayonet.

The **sabre** (*sabre-briquet*) had a single-bar cast brass hilt and slightly curved blade, with black leather scabbard with brass chape; it was carried by NCOs, *grenadiers*, *voltigeurs* and musicians, with a scarlet knot for *grenadiers*, green and/or yellow for *voltigeurs* and white for *fusiliers*, though regimental distinctions existed. The **musket**

was based on the 1777 pattern, with iron fittings, slightly remodelled in Years IX and XIII of the republican calendar, hence its pattern-name *An IX/XIII*. A smoothbore flintlock of 17.5mm calibre, its length was 151.5cm and it weighed 4.375kg. *Voltigeurs* often carried the shorter dragoon musket, 141.7cm long and weighing 4.275kg, more appropriate for skirmishing.

There was no official issue of a canteen, so each man provided his own (metal flask, glass bottle in wicker frame, gourd or wooden barrel). Other unofficial items included canvas satchels slung over the shoulder, and even cloth 'sausages' containing flour.

Not until 1805 were **great-coats** issued, and even then they were provided from regimental funds and only for campaign; thus many patterns existed — single- and double-breasted, beige, grey and brownish. The epaulettes of élite companies were usually worn on the greatcoat.

The coat was usually carried rolled atop the knapsack, but not until 1806 was official provision made by the addition of leather loops on the knapsack; before then, the coat was secured by string or leather straps provided by the individual.

The **undress cap** (*bonnet de police*) was blue cloth, with a tasselled stocking-end folded behind the headband, with red lace edging, tassel and piping, with red grenade or yellow horn badge for élites; it was usually carried beneath the cartridge box. **Hairstyles** varied, the queue declining in use from around 1803, though regimental practice varied: as late as 1804 cutting the hair short was an imprisonment offence in the 64th Line, which also prohibited the sideburns which became popular from the early 1800s. Moustaches were obligatory for élites.

**Rank** markings were in the form of diagonal lace bars on the lower sleeve: two orange bars for corporals, a gold bar on red for sergeants, and two gold for sergeant-majors; gold epaulette-edging and mixed-gold fringe and sword knots were often worn by sergeants and above. Service chevrons were worn point uppermost on the upper arm, in gold for senior NCOs and red for the remainder.

**Officers' uniforms** resembled those of the rank and file, in finer quality, with gold lace hat-loops and epaulettes, distinguished as follows: colonel, epaulettes with bullion fringes; major, the same but silver straps; *chef de bataillon*, as colonel but fringe on left only; captain, thin fringe on left only; *capitaine-adjutant-major*, as captain but fringe on right; lieutenant, as captain but red stripe on straps; *sous-lieutenant*, with two red stripes; *adjoint-sous-officer*, red



*Light infantry manning a customs post at the entry to Leipzig, 1806-07: print after C.G.H. Geissler. The chasseur (centre) has the 1806-pattern lozenge shako plate; at right is a chasseur wearing a brown greatcoat with epaulettes affixed. The soldier at left is a member of the town militia in sky blue with scarlet facings.*

Light infantry embarking on campaign: a German print of c.1806 showing shakos with the plume on the opposite side to the cockade.

straps with two gold stripes and mixed red and gold fringe on left.

Officers carried straight-bladed épées with gilt fittings and gold knot, suspended from white shoulder- or waist belts, though black or coloured waist belts, often with lace or metallic embroidered decoration, were popular. Elite company officers often carried curved sabres. On campaign, single-breasted undress *surtouts* without lapels were popular in place of the coat, dark blue throughout, save often for a red collar and (as worn by the 8th) red cuff-piping.

### Light Infantry

Light Infantry wore similar uniform, but with a shorter-tailed *coatee* with blue lining, turnbacks and lapels, all piped white, the lapels cut with a distinctive pointed lower end, and turnbacks bearing white horn badges. Officers' lace was silver, and buttons white metal, though at least the 2nd, 3rd, 12th and 28th *Léger* had brass buttons. The cuffs were officially dark blue with scarlet flaps and white piping, but variations included blue flaps, or scarlet or blue pointed cuffs; collars were scarlet with white piping. *Chasseurs* had blue shoulder straps piped white, but green epaulettes, sometimes with red 'crescents', were popular.

**Waistcoats and breeches** were dark blue, though white waistcoats were popular in summer. The short light infantry *gaiters*, cut to resemble hussar boots (with tassels and lace trim, red for *carabiniers* and white, red and/or green for *chasseurs*) were sometimes replaced by white linen gaiters in summer; loose **overalls** were popular on campaign, often dark blue.

The **headdress** was a squat shako (17.8cm high, though taller versions probably existed unofficially), of black felt with leather upper and lower bands and detachable peak. Ornaments varied: a



brass hunting horn was often worn on the front, and a tricolour cockade at the left, with a yellow or orange lace loop secured by one or two buttons; with a plume above, upright or drooping, scarlet for *carabiniers* and green for *chasseurs*. As the peak was detachable and the badge not universal, some regiments repositioned the peak so that the plume and cockade were displayed at the front. Cords suspended around the cap were green for *chasseurs* and white or scarlet for *carabiniers*; and the latter could also wear a fur cap, like that of Line *grenadiers*, but without a plate. Fur caps were not universal but granted to regiments requesting them; of those at Austerlitz, for example, the 2nd *Léger* received theirs under the Consulate, but the 27th not until December 1804.

*Voltigeurs* had *chamois* collars (piped red or white) and occasionally *chamois* cuff flaps, with epaulettes, plumes and sword-knots in combinations of yellow, green and/or red. *Carabiniers* and *voltigeurs* sometimes had red or yellow shako bands respectively.

**Equipment** was like that of the Line, though all carried the sabre, generally with red knot for *carabiniers* and green or green with red trim for *chasseurs*. The cartridge box frequently bore a brass horn badge, and greater use was made of the dragoon musket.

**Officers'** distinctions were like those of the Line, with silver epaulettes and buttons and long-tailed coats, and the bicorne was more popular than the shako. (As late as 1814 some members of the 9th *Léger* apparently wore the bicorne).

Emperor stumped past the sentry muttering 'Those Russian b———s think they can make us swallow anything'. 'Not on your life', interrupted the sentry, 'Not if we have anything to do with it!' (1) And their resourcefulness was legendary: after heavy fighting before Austerlitz, the 26th *Léger* were concerned that their colonel, Pouget, should pass a comfortable night, so built him a soft bivouac: 'they dragged together a number of Russian corpses, and spread a layer of hay on the top' (2). MI

The French infantry of Austerlitz were redoubtable men. When at the battle Gen. Sainte-Hilaire was considering withdrawal in the face of huge odds, Col. Pouset of the 10th *Léger* cried, 'General, don't pull us back... There's only one honourable way out — go bald-headed at whoever is in front of us, and above all don't give the enemy time to see just how few we are!' — an audacious tactic, which worked<sup>(1)</sup>. An ordinary *carabinier* of the 17th *Léger* revived Napoleon's flagging spirits before the battle, as the

### Notes

- (1) *Mémoirs du Général Baron Thiebault* (Paris, 1894) III p.476
- (2) *Mémoirs du Duc de Rovigo* (Paris, 1828) II pp.198-99.
- (3) *Souvenirs du Guerre du Général Pouget* (Paris, 1895) p.69.

### Sources

For details of uniform and organisation, see P.J. Haythornthwaite, *Napoleon's Line Infantry* and *Napoleon's Light Infantry* (London, 1983) Nos. 141 & 146 in the Osprey 'Men-at-Arms' series. The best modern history of the 1805 campaign is C. Duffy, *Austerlitz* (London, 1977). A number of reconstructions of the uniforms of the period are included in E.-L. Bucquoy, *Les Uniformes du Premier Empire: L'Infanterie*, ed. L.-Y. Bucquoy & G. Devautour (Paris, 1979).

# British Mounted Infantry (2)

MICHAEL BARTHORP  
Paintings by PIERRE TURNER

Part 1 of this article ('MI' No. 14) traced the development of Mounted Infantry — MI — in the British Army from the 17th-century dragoons until its abolition before the Great War, with particular reference to its use, organisation, and training as an officially recognised but non-permanent fighting Arm in the last quarter of the 19th century. This concluding part examines in detail the uniforms, equipment, and weapons of MI; and mentions briefly some of the most important figures in the history of the Arm.

## ARMAMENT AND ITS ATTACHMENT

Since he was foremost an infantryman, the MI soldier's armament was the current rifle and bayonet: the .45in. Martini-Henry until 1888, thereafter the .303in. magazine Lee-Metford or Lee-Enfield — although in the Zulu War Swinburne-Martini carbines, with a bowie knife instead of a bayonet, were used; and in the Burma campaign of the 1880s, Martini-Henry carbines. For a while No.2 Squadron, Imperial MI (see Part 1) were served out with swords, seemingly in contradiction of their true rôle. In the late 1890s a machine gun

section of two horse-drawn Maxims was attached to an MI battalion.

Until 1882 the MI soldier had no means of carrying his rifle when mounted other than slung across his back or held in his hand. The latter was unsatisfactory for an inexperienced rider, and the headdress could get knocked off when disengaging a slung rifle. The carbine bucket then used by Cavalry would not accommodate the rifle.

A rifle bucket based on a bag used by the Namaqua tribe in South Africa had been devised in the 1860s by a Volunteer unit, the Hampshire Mounted Rifles, for attachment to the saddle's off-side



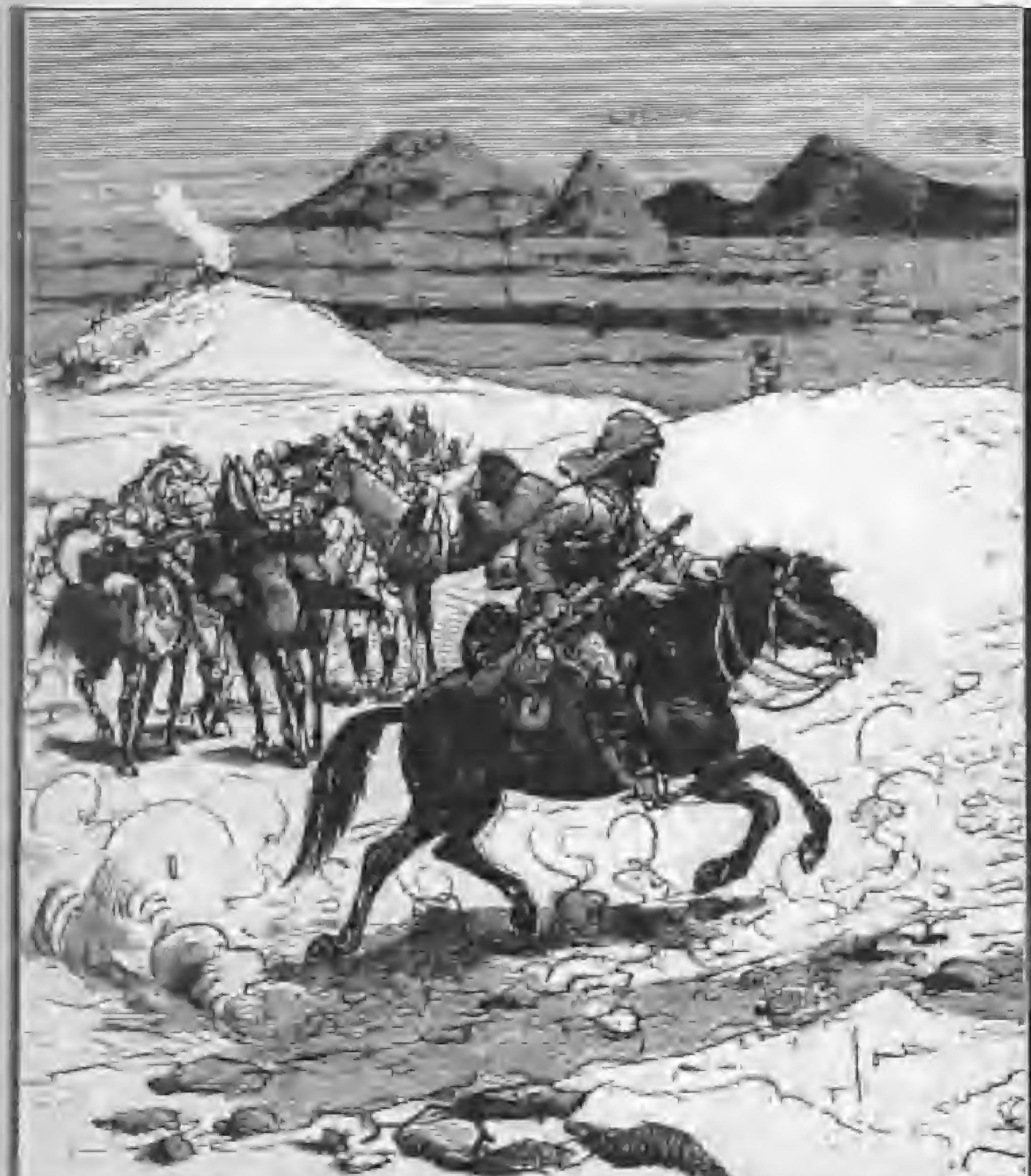
wallet. This so-called 'Namaqua bucket' was adopted by the MI formed in South Africa after the Transvaal War, but slung behind the rider's right leg with the rifle carried butt down. From August 1882 this bucket was officially approved for all MI use: 24in. deep, with a folding flap to cover the breech, it was attached to the saddle

### Below:

MI skirmishing at Tamai, outside Suakin, 1885. The firing line is supervised by an officer in laced field boots accompanied by his bugler. The men's horses are held

Two MI in Burma, c.1885, in Indian khaki drill service dress with canvas gaiters, no spurs. They are armed with Martini-Henry carbines and besides the 1882 bayonet, carry a haversack over the right shoulder. The waistbelt suspending the bayonet is worn under the frock. Note the Burma pony, standing between 12 hands 2in. and 13 hands — sturdy, a good jumper, lacking pace but strong-backed, and able to exist on almost any food available. (National Army Museum)

(left) under cover, and a scout gallops up to report. Details from a sketch on the spot by C.E. Frith, war correspondent to 'The Graphic'. (Author)

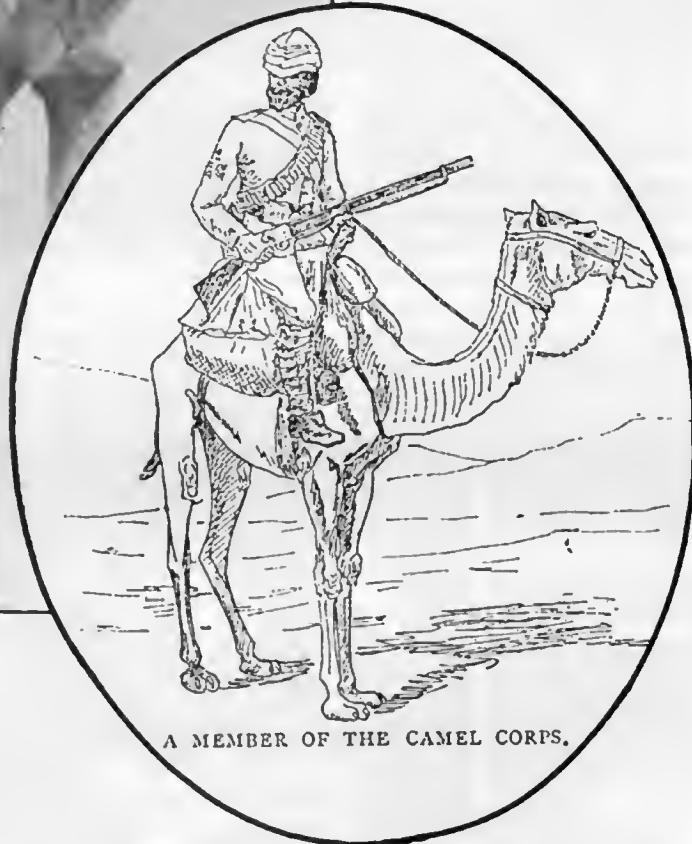




Two Grenadier Guardsmen of the Camel MI formed at Suakin in 1885. Both have Martini-Henry rifles, 1882 bandoliers, Oliver pattern water-bottles and waistbelts. Instead of foreign service helmets they wear mushroom-shaped solar topis, specially manufactured in India and shipped to Suakin in April 1885. (National Army Museum)

Its approval was too late for the MI employed in Egypt; and the MI at Suakin in 1885 seem to have preferred the hand-held method, according to pictorial evidence. It was, however, issued to the Camel Regiments on the Nile.

In 1894 a cut-down version, 12in. deep, was authorised to take the magazine rifle. It was suspended from the saddle's rear arch by two straps adjusted so that the rifle muzzle was below the rider's shoulder, with a third strap at right angles to the bucket passing



#### Right:

Grenadier Guardsman of the Guards Camel Regt., 1884-85: sketch by Lt. Count Gleichen, GCR. Uniform: helmet with puggaree; grey serge frock with red right sleeve badge 'I' over 'GG'; Bedford cord breeches, blue puttees, brown boots. Equipment: 1882 pattern bandolier, brown leather waistbelt with 20-round pouch, haversack, water bottle. The kit carried on the camel is listed in the text; seen here are, behind right leg, red leather saddle cover, half-covering the red leather and white canvas saddlebags; in front of leg, corn bag; rolled blanket and shelter tent; in front of pommel, red cushion. The 1882 rifle bucket is concealed behind the saddle cover and bags. (Author)

cantle on the off-side by a strap, with three further straps to the girth straps, under the horse's belly to the near-side front of the saddle, and to the saddle arch, passing round the cantle to be buckled round the rifle below its back sight (see Part I, 'MI' No. 14, p. 27).

through the surcingle. The soldier rode with his right arm through the rifle sling, which for MI was longer and with its lower end attached to a swivel on the butt, rather than in front of the trigger guard. Use of the long sling was subsequently superseded by the issue of a short sling

attached between the piling swivel below the muzzle and the upper sling swivel. The 1894 bucket was generally used during the Boer War, though some officers forbade it to prevent men leaning on their rifles in the buckets, which gave the horse a sore back. It continued in use after the introduction, from 1902, of the Short Lee-Enfield but was eventually replaced by a deep, muzzle-down bucket.

#### UNIFORMS

The clothing of an MI soldier was that of an infantryman but modified for riding. In **South Africa** in the late 1870s and early 1880s this was the foreign service helmet, without puggaree; undress scarlet or black (Rifles) serge frock; and either the normal blue or black trousers, brown corduroy trousers tailored to fit closely at the ankle, or whipecord pantaloons, all reinforced inside the knee, with infantry leggings. A Zulu War eyewitness said of these MI: 'They looked like a cross between a groom out of place and a soldier after a night in cells and a big drink'.<sup>(1)</sup> The South Staffords and KRRC MI in **Egypt** were similarly dressed but with Bedford cord pantaloons and canvas gaiters (see Part 1, p. 27).

Grey serge frocks, Bedford cord breeches or pantaloons<sup>(2)</sup> and blue puttees were worn by the Camel Regiments on the **Nile** and the MI at **Suakin**; by 1885 most of the latter, including the Guards MI, had khaki drill frocks. In **Burma** khaki drill was worn, either with khaki puttees or canvas gaiters. For the **Bechuanaland** Expedition of 1885 the Royal Scots MI received slouch hats, dark brown corduroy frocks, Bedford cord breeches or pantaloons and blue puttees; but in **Zululand** three years later they reverted to helmets, blue jerseys<sup>(3)</sup> and puttees of regimental tartan. Blue jerseys were also worn by 2/Duke of Wellington's MI in **Rhodesia** in 1896; but the MI Battalion from England received khaki drill frocks and breeches — though on operations fre-

quently wore shirt-sleeve order. Up to 1902 MI training in **England** also had cord pantaloons or breeches and blue puttees, but wore them with scarlet/black frocks and either the home service helmet or its equivalent, or undress headgear: the Glen-garry, field service cap or, from 1900, the Brodrick cap.

During the **Boer War** all wore khaki drill, later serge, frocks, breeches or pantaloons and khaki puttees. Helmets were worn by some MI throughout the war, but the slouch hat also became common and, from 1902, was worn for training at home with the khaki serge introduced in that year for all purposes other than ceremonial. From 1905 the khaki service dress cap was approved. Abroad the Wolseley helmet began to replace the old pattern, but in the **Somaliland** operations of 1902-03 the Hampshires' MI still had the latter, which was worn with shirt-sleeves, breeches and puttees.

Spurs, so characteristic of the mounted soldier, were worn by some MI but not by others, as can be seen in the accompanying illustrations. MI officers' dress generally conformed with their men's, though some preferred some sort of field boot to puttees or, particularly during the Boer War, the leather 'Stohwasser' gaiters fastened with a spiral strap.

#### Above:

*Guardsman of horsed MI at Suakin, 1885, in foreign service helmet with curtain, khaki drill frock, Bedford cord pantaloons, blue puttees, ankle boots and spurs. The 3/Grenadiers, 1/Coldstream and 2/Scots Guards each provided 2 officers and 50 men for the horsed MI and a total of 3 officers and 94 men for No.1 Company of the camel MI. (Brig. P.N.R. Stewart-Richardson)*

#### Left:

*Sgt. Seymour, 2/Gordon Highlanders of the Highland Company, MI Battalion for Rhodesia before leaving Aldershot, 1896. He wears the Highland undress jacket, cord breeches, blue puttees and no spurs, 1882 bandolier and waistbelt. He carries the Lee-Metford rifle, for which the 1894 bucket is attached to the saddle behind his right leg. Note the saddle, harness, and typical MI cob. (Navy and Army Illustrated)*



## PERSONAL EQUIPMENT

Unlike the 17th century dragoon, who found a pouch more convenient for his ammunition than the musketeer's collar, or bandolier, in the 19th century it was the bandolier that distinguished the MI soldier from his counterpart on foot, at least from the 1870s onwards, the rare examples prior to that date using pouches (see Part 1).

According to photographs the MI bandolier in the Zulu and Transvaal Wars was simply a leather belt of open cartridge tubes slung over the left shoulder. In Egypt in 1882 the MI appear to have used the normal 1871 Valise Pattern equipment waistbelt and twin 1877 pouches thereon, but without the shoulder braces (see Part 1, p.27). In that year, however, but too late for that campaign, a 'Bandolier, Mounted Infantry, Mark I' was officially approved 'to govern supplies when specially ordered'.

This was a brown leather shoulder belt fitted with a buckle and 50 cartridge tubes divided into four compartments each of ten tubes and two of five, with a 9 1/4 in. strap opposite the buckle for securing round the soldier's waistbelt to steady it. Each

compartment had a leather cover fastened by two brass studs fixed in the tubes. This bandolier remained the standard pattern, subject to minor modifications to the tubes, until 1903; and was used in all the post-1882 campaigns mentioned in Part 1.

In addition the MI soldier usually carried on his waistbelt, which also supported his bayonet, one pouch of the current infantry pattern: either the 1871/1877 20-round type, the 1882 40-round, or the 1888 Slade-Wallace 50-round pattern. The Camel Regiments in 1884 had a brown leather 20-round pouch on a waistbelt of the same material with snake clasp. During the Boer War the waistbelt pouch was dispensed with but one or more additional bandoliers were issued, being worn over the right shoulder and/or round the waist.

Different types of bandoliers made of webbing, as used by the US Army, also made their appearance, some having covers, others with open tubes; one in common use was a 100-round type, constructed from two 50-round belts one on top of the other. Though cheap and easily replaceable, the webbing tubes expanded with use, thereby allowing rounds to fall out.

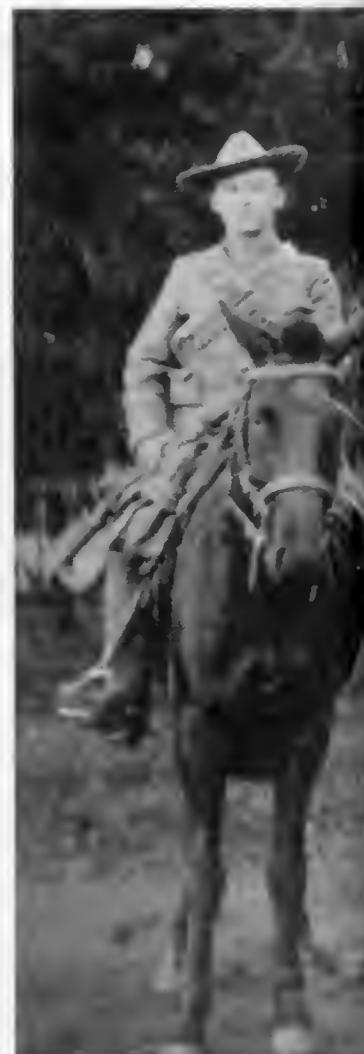
After the war the bandolier, having been adopted by all Arms during hostilities, became the central feature of the 1903 infantry equipment and was issued to all mounted troops; but the 1882 pattern



**Above:**  
MI of 1/Northumberland Fusiliers, South Africa 1899, in covered helmets, khaki drill frocks, cavalry pantaloons, khaki puttees and spurs. The rifles are Lee-Enfields; equipment, 1882 bandoliers, waistbelts with bayonets. Note near-side view of saddlery, with wallets, shoe-case and forage bag, mess-tin and rolled groundsheets at back of the saddle, folded blanket under it. (National Army Museum)

changed to a new design, still of brown leather but with five pockets each holding two five-round clips. Infantry carried another five pockets on the brown leather waistbelt. This bandolier remained the MI ammunition carrier until the Arin was phased out.

Besides his ammunition carrier, waistbelt and bayonet frog, the MI soldier carried a haversack over the right shoulder, and the current water-bottle over the left unless it was attached to the saddle.



*The two-horse, two-wheeled carts, which transported an MI unit's ammunition, forage and tools, of 2nd Regular MI crossing the Vaal, 1900. (National Army Museum)*



### Equipment carried on the horse

His other kit, to be carried on the horse, was listed by Capt. Parr when commanding the Pietermaritzburg MI School in 1882 as follows: under the saddle, the 'numnah' or a folded blanket; on the cantle, the mess-tin, blanket rolled in water-proof sheet, and pic-

#### Left:

MI in khaki serge uniforms, South Africa, 1901, showing how the rifle was carried in the 1894 bucket. Both men have one 1882 bandolier and one webbing bandolier, the latter worn round the waist by the left man and over the right shoulder by the nearest man. (Imperial War Museum)

#### Below:

Five Militia sergeants of 11th MI, South Africa 1902. From left: Sgt. Hayward, 3/Wiltshire, Sgt. Aisher, 3/Dorsets, C/Sgt. Townsend, 4/E.Surreys, Sgt. Bateman, 3/Dorsets, Sgt. Keeley, 3/Wiltshire. All are in slouch hats and khaki serge and have three bandoliers each. Bateman and Keeley have whistles attached to their right-hand pocket buttons. (R.G. Harris)



quetting peg; over the front arch, the near-side wallet containing grooming kit, cleaning kit, forage cap, ten rounds, and off-side, shirt, drawers, socks, ten rounds; over the wallets, saddle cover and waterproof coat; in each shoecase, one horseshoe, ten rounds; nose-bag and hoof pick<sup>(4)</sup>.

Together with bridle, saddle and rifle bucket, a fully clothed, armed and equipped

10-stone man, with his 110 rounds of ammunition, would make a total weight on the horse of 16 stone 7lb. During the Boer War Col. Douglas Haig calculated the minimum weight possible, 'after reducing it to the barest necessities', to be borne by a cavalry horse as 17 stone 6lb. 10oz., (but including 200 rounds) and this he pronounced as 'too heavy'<sup>(5)</sup>. So strenuous were the demands

(2) Private, 2nd Worcester-shire, dressed for home service MI training, 1891, from a photograph. He wears the Glengarry, shortly to be superseded by the field service cap; the short-lived 1890-92 undress frock with facings only on the shoulder straps; and the usual M1 pantaloons, puttees and spurs, though the latter have different straps from Plate 1. The 1882 pouch is here worn on the left. Despite the Lee-Metford's introduction from 1888, this battalion still had Martini-Henrys in 1891. The bayonet frog shown here

changed to a buckle and strap type to take the Lee-Metford sword bayonet, but this proved insecure for M1, who reverted to this type from 1892.



2



(1) Corporal, 1st Berkshire, MI Battalion at Suakin, 1885, based on C.E. Fripp. Originally 10 officers and 300 men strong, this battalion was drawn from the Guards Brigade, 1/Royal Irish, 2/East Surrey, 1/Berkshire, 1/KSLI. Besides helmet and ordinary infantry scale of clothing (including two sets of khaki drill frocks and

trousers), these MI additionally received: 2 prs. drawers; 1 pr. jack spurs; 1 pr. Bedford cord pantaloons; 1 pr. puttees; 1 canvas bag; 1 cavalry mess-tin (see 'MI' No. 10, p.15, fig. 18; also fig. 14 for water-bottle); 1 bandolier. The Guards and Royal Irish had 1882 belts and pouches but the Berkshires still had 1871 waistbelts and 1877 pouches,

according to Fripp, who also shows MI suspending their bayonets over their haversacks instead of under as was customary.

The MI at Suakin in 1884 — only 120-odd strong and drawn from 1/Royal Sussex, 1/Black Watch, 3/KRRC and 1/Gordons — had worn grey serge frocks.

made of horses on the veldt that all mounted men were constantly under pressure to reduce further their kit whenever possible.

The kit of camel MI was attached to the camel saddle, a wooden V-shaped structure with padding round the hump, two girths, two stirrups and vertical pommels either end. Over it was slung a double saddle-bag, made of white canvas and red leather, which contained the man's clothing and personal kit; underneath the bags were strapped, on the near-side, the rolled greatcoat and waterproof sheet, on the off, a rolled blanket and shelter tent (one for every two men). Attached to the rear off-side of the saddle was the 1882 rifle bucket with its long strap passing under the belly and buckled on to the near side. Balancing the bucket on the nearside was an Egyptian leather 'mussek', or long water bottle, whilst hanging from the rear pommel was a water-skin resting on a yellow leather flap. From the forward pommel hung two 15lb. corn bags for the camel, sufficient for three days. Above them was a small red leather cushion, its use, according to Count Gleichen, 'doubtful': presumably this was copied, without establishing its purpose, from Arab camel saddles, in which it forms a rest for the legs when crooked round the pommel (see 'MI' No.4, p.51). Folded over the saddle bags was the second blanket, while over all went the red leather saddle cover with padded seats and flaps fore and aft to protect the water carriers and corn-bags from the sun.

#### Mounted Infantrymen of note

No account of British MI would be complete without mention of some of its more important figures who, in the face of many difficulties, achieved distinction for the Arm in its relatively short life. That it became accepted as a necessity owed much to Evelyn Wood, who constantly preached its value in his lectures and writings<sup>(6)</sup>.

3

(3) Private, MI Battalion, Mashonaland Field Force, Rhodesia 1896-97. From a sketch by Lt. Hare, 2/Norfolk detachment of the English Company, whose other detachments were from 2/Hampshire, 1/South Lancashire and 1/Derbyshire. The company strength was 5 officers, 1 colour-sergeant, 5 sergeants, 6 corporals, 1 bugler, 3 smiths, 1 saddler, 1 farriers, 96 privates. The Rifles, Highland and Irish com-



(4) Officer, Regular MI, South Africa 1901, based on photographs. The wearing of slouch hats was more common in 1901-02 than 1899-1900, e.g. photos show 2nd MI in 1900 all in helmets, 8th MI in 1901 all in hats, 3rd MI in 1901 in a mixture. With his frock and breeches this officer wears Stohwasser gaiters. He carries a Lee-Metford carbine, soldier's

bandolier, haversack, binoculars (probably, from the case, the Lawrence & Mayo 'Lynx' type) and a telescope, the latter for the longer range observation needed on the veldt's great distances, the binoculars having only  $\times 3$  magnification. His water-bottle was strapped to the saddle, together with mess-tin and groundsheet.

4

MI of the post-war South African garrison, c.1907, in parade dress of scarlet frocks, khaki pantaloons and puttees, 1903 bandoliers, waistbelts under the frocks; SMLE rifles. From left: 2/Norfolk, 3/Royal Fusiliers, 2/Argylls, 2/Camerons. The Norfolk and Argyll have Wolseley helmets, the others the old pattern. (R.G. Harris)

Later its cause was espoused, as seen in Part 1, by Lord Roberts; as well as by Col. Henderson, the influential military historian, lecturer and biographer of 'Stonewall' Jackson, and by Erskine Childers, the author<sup>(7)</sup>.

Among MI's practitioners Carrington of the 24th, who subsequently became a general commanding in Rhodesia during the Matabele Rebellion and organised the Rhodesian Field Force during the Boer War, has been mentioned in Part 1; as has Parr, later a major-general, who ably commanded the MI in Egypt after it had been organised by Maj. (later Lt. Gen.) E.T.H. Hutton, KRRC. Hutton was responsible for setting up and running the first MI School at Aldershot, later commanding one of the first MI brigades in the Boer War, and eventually all MI in South Africa. E.A.H. Alderson, Royal West Kent, served as a subaltern with MI in the Transvaal and Egyptian Wars, and commanded his regiment's detachment of the MI Camel Regiment on the Nile; he became the first adjutant of the MI School under Hutton, commanded the MI Battalion in Rhodesia in 1896 and was another MI brigade commander in 1900; as a lieutenant-general he commanded the Canadian Corps in the Great War.

The Boer War, particularly the guerrilla phase, threw up several notable leaders of MI columns, among them the future field-marshals, Rawlinson and Plumer, the latter's men being chiefly Australians. The celebrated horseman and polo player (though a Durham Light Infantryman), Beauvoir de Lisle, had his first experience of MI on the Egyptian Frontier in 1885; and his command in South



Africa included the 6th Regular MI, one of the most highly regarded MI units (even by the Australians — no mean judges). After the war, much to Childers' disgust, he lent his support to the French/Haig cavalry school (see Part 1) — which may later have assisted him to the command of 1st Cavalry Division and subsequently a corps in the Great War. The 8th Hussar, Lt. Col. P.W.J. Le Gallais, with the 5th and 7th Regular MI, came closest to capturing the elusive De Wet at Bothaville in November 1900 but was killed in the action. Perhaps the most effective of all, and most feared by the Boers, was the night-raiding gunner colonel, G.E. Benson, who fell among his mounted infantrymen, Regulars and the volunteer Scottish Horse at Bakenlaagte, 30 October 1901.

As for the hundreds of infantrymen, many previously unaccustomed to horses, most with individuality and initiative drilled out of them on the barrack square, yet who learned to ride often while actually on campaign, to think for themselves, to scout, skirmish and shoot straight, let Rudyard Kipling have the last word:  
*'That is what we are known as — we are the push you require For outposts all night under freezin', an' rearguard all day under fire.'*

Anything 'ot or unwholesome?

Anything dusty or dry?

Borrow a bunch of ikonas!

Trot out the ... MI!

I wish my mother could see me

now

a-gatherin' news on my own, When I ride like a General up to the scrib and I ride back like

Tod Sloan,

Remarkable close to my 'orse's neck

to let the shots go by.

We used to fancy it risky once (Called it a reconnaissance

once),

Under the charge of an orf'cer

once,

But now we are MI!<sup>(8)</sup>

MI

#### Notes:

(1) Quoted Anglesey, Vol.III, p.184 (see Sources).

(2) Breeches were full in the thigh and terminated below the knee, fastening with buttons or laces. Pantaloons, the cavalryman's legwear for mounted duties since 1871, were less full in the thigh and terminated at the ankle, fitting closely round the lower leg. The difference is not always clear in photographs. Breeches were more usually worn by MI officers.

(3) In fact 'guermseys', made in the Channel Islands.

(4) See illustration, Part 1.

(5) Anglesey, Vol.IV, p.371.

(6) See 'MI' No.8, p.49

(7) Author of *The Riddle of the Sands*; Vol.V of 'The Times' History of the War in South Africa; and polemical military works. Volunteer with the CIV in S. Africa, RNAS and RFC in Great War. Joined IRA in 1922, and executed.

(8) From Rudyard Kipling's 'MI (Mounted Infantry of the Line)', 1901.

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#### Sources:

Lt. Col. E.A.H. Alderson, 'With the Mounted Infantry and the MFF, 1896, (1898)

Marquess of Anglesey, 'History of the British Cavalry', Vol.III, 1872-98 (1982), Vol.IV, 1899-1913 (1986)

Sir Charles Brookdale, 'Major-General Sir H.H. Parr' (1917)

Count Gleichen, 'With the Camel Corps up the Nile' (1889)

Lt. Gen. W.H. Goodenough & Lt. Col. J.C. Dalton, 'Army Book of the British Empire' (1893)

Maj. E.T.H. Hutton, 'Mounted Infantry' (Illustrated Naval & Military Magazine, 1884)

C.C.P. Lawson, 'History of the Uniforms of the British Army', Vol.I (1940), Vol.II (1942)

Lt. Col. N. Newnham-Davies, 'Transvaal under the Queen' (1900)

Maj. H.G. Purdon, 'Historical Sketch of the Predecessors of our MI' (n.d.)

Ian D. Skennerton, 'List of Changes in British War Material', Vol.I, 1860-86 (1980), Vol.II, 1886-1900 (1977)

Maj. G. Tylden, 'Mounted Infantry', 'Carrying of Arms' and other articles, Journal of the Society for Army Historical Research (1922-88)

Brig. P. Young, 'Edgehill 1642' (1967), 'Naseby 1645' (1985)

Various campaign histories of the Zulu, Transvaal, Egyptian, Sudan and South African Wars.

Periodicals:

'The Broad Arrow' (1901)

'The Graphic' (1884-5-6)

'Illustrated London News' (1879-1904)

'Navy & Army Illustrated' (1895-1902)

'Soldiers of the Queen' (Journal of the Victorian Military Society, 1974-88)

'United Services Journal' (1836)

# The London Trained Bands, 1588 (2)

JOHN TINCEY

Paintings by RICHARD HOOK

Part 1 of this article ('*MI*' No. 14) described the origins of the Trained Bands, and their clothing and armament, regimental organisation and flags on the eve of the Armada crisis. This concluding part traces the events of 1588.

By the spring of 1588 it had become clear that the Spanish would make an invasion attempt sometime during the coming summer. Throughout the country the preparations of the Trained Bands were stepped up; and on 11 March the Privy Council sent orders to Sir George Bonde, the Lord Mayor of London:

'These therefore to let you understand that we have thought good to require our loving friends Sir Frauncis Knowles, knight, Treasurer of her Majesty's Household, and Sir John Norris, knight, to confer with you in that behalf, to appoint a convenient time for the better training of the said 6,000 and for

the better ordering and sorting with armour and weapons, and reducing the same under captains and ensigns, to th'end that they may be trained and made apt to use their weapons and disciplined, whereby they may be the more serviceable and better instructed to serve, either for the defence of the said City, or to join with that army that shall be appointed for the defence of her Majesty's person, as occasion shall serve; and that th'other 4,000 men may also have their several armour and weapons appointed unto them, and to be commanded to be in readiness to serve also in case of necessity for like purposes as is aforesaid...' <sup>(1)</sup>

New guard duties were to be performed, with five companies assembling at the Exchange at 6 p.m. every evening. After the saying of prayers and the giving out of the watchword they would march to their guard posts.

## ORGANISATION AND TRAINING

The city responded by requesting Edmund Yorke, an experienced soldier, to make his recommendations for the organisation of the city's defences <sup>(2)</sup>. Yorke advised that 15,000 men should be raised in companies of 150 men, each ten companies being placed under a colonel to form a regiment. Each company would consist of eight halberdiers, 60 armoured pikemen, 30 musketeers, 50 harquebusiers and two sergeants. Their arms were to be inspected, and corslets, pikes, harquebuses, muskets and morrions were to be given a regimental mark — to prevent arms being lent, to be shown again by another Trained Bandsman when his turn came to be inspected.

At gates the guard would change every hour, with rounds every half-hour to relieve the five or six men manning the walls.

Five companies would be drawn out every day to be taught to wear their armour correctly and to train in the use of their weapons. After 20 days all the companies would have gone through this process; and from then on one regiment would train every 20 days, and the whole force would train together every two months. It seems that this plan was not fully carried out, for no more than the existing 10,000 militia were called upon when the Armada arrived.

News in June that the Armada had sailed brought a near-panic pace to the defence preparations, and Trained Band officers were ordered not to be absent from their commands <sup>(3)</sup>. A request was made for 1,000 corslets from the Tower Armouries to equip the London Trained

continued on page 32

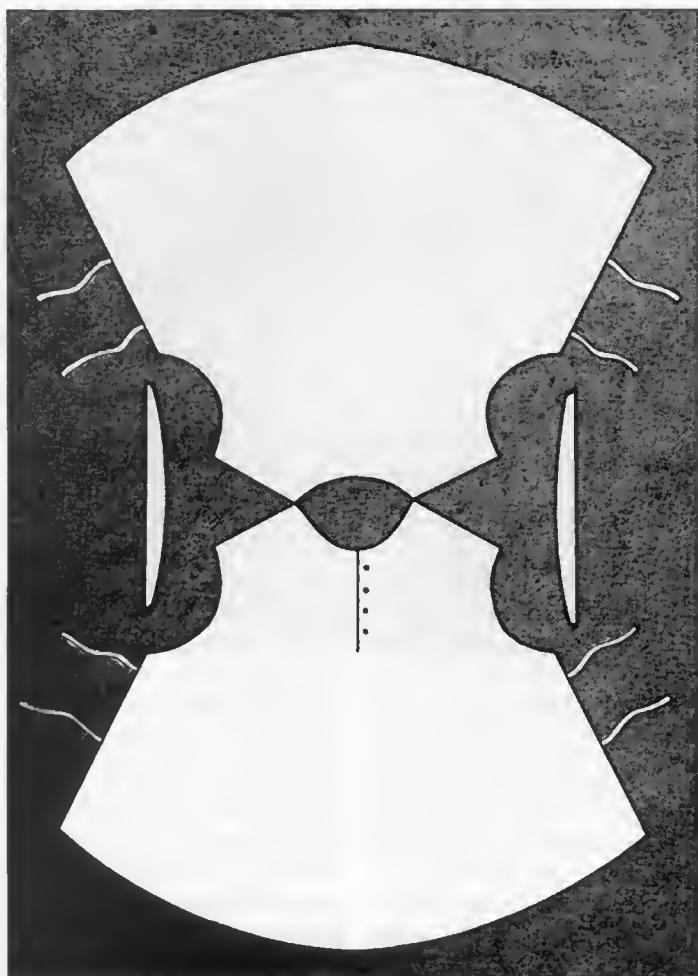
Like the flags, the musicians of a company were paid for by the captain either out of his own pocket, or in the case of the London Trained Bands, from a grant given him for that purpose by the city. A contemporary manuscript tells us that a captain should provide himself with 'one piphe two drumms of good understanding in their occupacon' <sup>(13)</sup>. The duties of a musician were more serious than simply to entertain the soldiers on the march: they should be 'chosen men of able personage, hardy of courage, secret, and ingenious of sundry languages, able to use and instruct the sounds of their instruments the company dothe diligently learn, know and observe the same. Such be often times sent on messages, to summon forts and holdes, to carry ransoms and redeem prisoners, which of necessitie requireth languages. Many sounds and callings of their instruments is needful of knowledge: as well to march, approach, assault, alarm, a retreat and many others...' <sup>(14)</sup>. How many of such paragons, clearly echoing the qualities of the medieval herald, would have been available for recruitment among the citizens of the average London ward in 1588 must remain open to question. (The British Library)



**Right:**

Pattern of a cassack. The musketeers and calivermen in the Lant Roll wear black cassacks made specially for the occasion; these may have been of similar cheap design to those worn during the Armada emergency. During normal militia service the Trained Bandsman wore his own clothing, but when called to serve in a Royal Army he was entitled to 'coat and conduct money' — literally, a coat to wear and the money necessary to get him to the army's rendezvous. These coats were made up quickly when the need arose, and would have been of the simplest possible design. Other pictures of the time show that they had a small opening at the neck to be fastened by closely spaced buttons. They were put on over the head like a tabard, and secured with tapes down the sides. Although sleeved versions were made, those worn by the HAC were of a cheaper, sleeveless design and reached to just below the waist.

This reconstruction must be regarded as theoretical, as not all the details in the Lant Roll are clear. Some soldiers seem to have cassacks with front opening, but on others this is shown as a line of small dashes, perhaps indicating stitching. The pattern is based on a loose gown preserved at Hardwick Hall, and contemporary portraits.

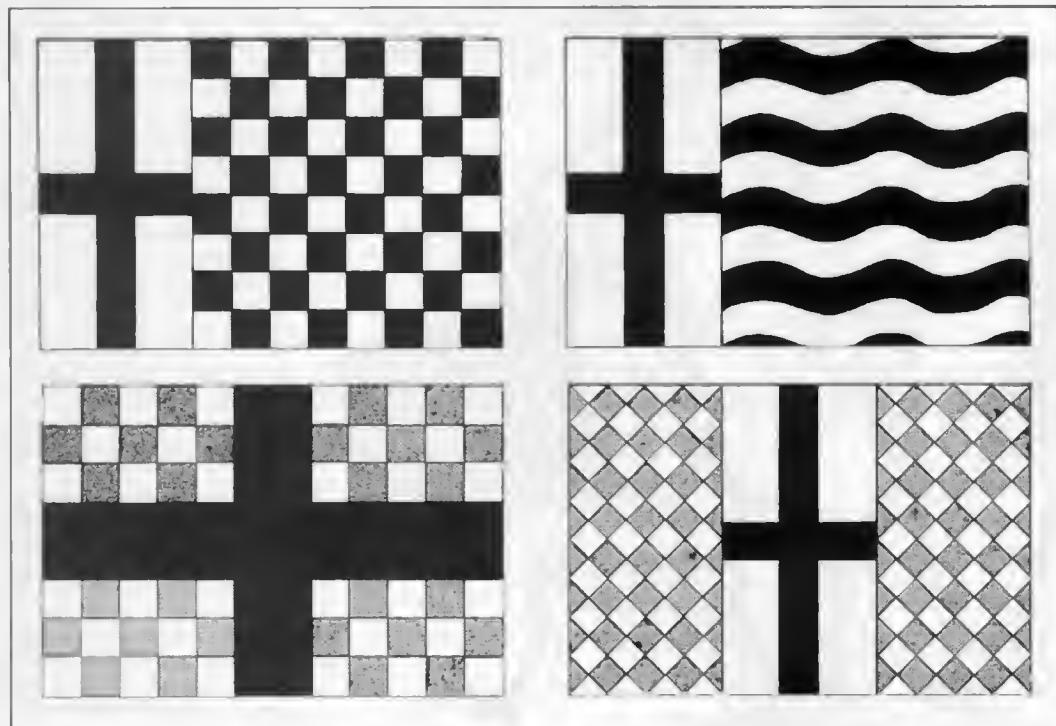


**Below:**

Flags of the London Trained Bands, 1588. Richard Robinson's record of the flags carried by each company (see Part 1, 'MI' No. 14) attempts to describe them in heraldic terms; unfortunately the flags were not constructed according to the principles of heraldry, so his

descriptions are often unclear. Tudor flags were decorated with a wide variety of colours and shapes, but almost all included the red cross of St George — though see our colour plate for an exception. These four reconstructions are: (Top left) Cheapside Ward of the West Regiment; cross of St George with red

and white checks. (Top right) Billingsgate Ward, East Regt.: cross of St George with red and white waves. (Bottom left) Bredstreeete Ward, South Regt.: red cross over blue and black checks. (Bottom right) Farringdon Without Ward, West Regt.: cross of St George, blue and yellow diamonds.



**Richard Hook's reconstructions opposite:**

(1) **London Trained Band caliverman, 1588.** Despite the superior penetrating power of the musket ball the caliver remained the mainstay of the London 'shot', outnumbering the muskets by four to one. This man is based on the HAC(?) figures in the Lant Roll, but has changed his civilian hat for the fashionable 'Spanish'-style morion helmet. The Spanish spy, De Vega, reported that men who remained to serve in the Trained Bands — in contrast to those who volunteered for sea service — received red coats. The pattern of this cassack is based upon those worn in the Lant Roll, and upon written descriptions of the garments issued to other Trained Band soldiers of the day.

(2) **Ensign of the London Trained Bands, 1588.** The duties of the ensign were laid down in a book of 1562: 'He is chosen a man of great experience and of able personage, hardie of courage to advance and display the same, which at the receiving thereof professeth rather to loose his life there in than to neglect his duty in service of the same. He must be secret, silent and zealous, often maintaining, animating and comforting the company with his discreet words never to retire but when of noble policy the higher officers commandeth the same.'

This ensign wears suit of the highest fashion decorated with woven braid. The doublet has a peascod belly, which remained popular in England from c. 1575 to 1600. His matching breeches, although reaching down below the knee like the 'venetians' worn by the soldiers, retain the trunk hose filled with bombast stuffing to give them their full, rounded shape. His hat is made of thick felt moulded in the shape of a helmet, stiffened with linen and covered with velvet. The flag he carries is that of the Portsooken Ward company of the East Regiment.

(3) **Pikeman of the Honourable Artillery Company, 1587.** As dedicated followers of military fashion the pikemen of the company equipped themselves with stylish peascod breastplates; the extended belly, copying the doublet of the day, seems to have had no defensive or other virtue apart from fashion. The pikemen in the Lant Roll are clearly wearing their own clothing, and have not been issued with black cassacks like the other soldiers at Sir Philip Sidney's funeral. Their individual wealth is proved by the delicate slashings (literally, cuts in the cloth to show a richly coloured lining) and braiding which decorate their suits.





**Left:**  
English 'jack of plate', c. 1570. By the time of the Armada the jack was regarded as obsolescent. It consisted of a canvas or leather doublon on to which were stitched overlapping metal plates, some of which are visible here through the damaged material of the skirts. The criss-cross cords hold the plates in place, and each plate is secured through a central punched hole, where the cords form a knot. The front opening is fastened by a leather lacing. The belt helps to support the weight of the peascod belly protruding over it. In 1585 archers of the London Trained Bands wore jacks covered in a cheap black material called fustian. (Courtesy of the Board of Trustees of the Royal Armouries)



**Centre:**  
A matchlock musket of around 1560, probably of German manufacture. The matchlock was a simple and fairly reliable mechanism: pressure on the trigger pulled the smouldering match-cord, held in the jaws of the 'serpent', back and down into the pan filled with priming gunpowder. The resulting explosion set off the main charge in the barrel via the touch hole. This example has a vertical metal shield behind the pan to protect the musketeer's eyes from the 'flash in the pan'. At this period advice on training with firearms specified 'the first three days of the training of the shot is appointed to be only with false fires, to assure their eyes to the use of the harquebus<sup>(16)</sup>'. The match had to be removed from the screw-jaws of the serpent and held in the left hand every time the musketeer reloaded, to avoid accidental explosions as loose powder was poured into the pan. It also needed constant repositioning as it burnt away. The small tube just visible here at the top of the breech has been interpreted as a means of keeping the trailing match neatly out of the way; in fact it is a rear sight, proving that the musket was intended to be aimed, even though it was considered inaccurate at over 100 yards. (Courtesy of the Board of Trustees of the Royal Armouries)

Bands<sup>(4)</sup>; but when Sir Francis Walsingham offered to have armour made for them in Norfolk, the city officials preferred to pay Mr. Hopkins of the Minories three shillings to work through the night to meet their needs<sup>(5)</sup>.

A list made in December 1589 gives the quota of men drawn from each ward in the city<sup>(6)</sup>. A total of 20,696 are listed as 'able householders and servants of our nation'; 933 as 'able strangers'; and 36 as being of 'suspect religion'. From these, 10,007 men were called to serve. Although this is a high proportion of the able men, it is evident that many of London's inhabitants were not considered to come within the 'able' category.

#### The Spanish spy

At the beginning of April 1588 Antonio de Vega, a spy

living in London, reported to his paymaster, the Spanish Ambassador in Paris: 'A general muster has been held in London of those capable of bearing arms, and hardly 10,000 men were found fit. This will appear strange, but it is true as St John's Gospel<sup>(7)</sup>. By mid-May, however, De Vega had revised his opinion of the city's defensive capabilities:

'The 6,000 men raised in London meet for drill twice a week. They are certainly very good troops considering they are recruits, and are well armed. They are commanded by merchants, as are also the ships contributed by London and the other ports. The three sons of Knollys are appointed colonels, but Norris was not allowed to leave his post on the frontier<sup>(8)</sup>. The troops are divided into 40 companies of 150 each, and it is said that

they have altogether 120,000 men under arms, as musters are being held all over the country. In London they are drawing 50 men from each parish, at the cost of the city, to send on board the ships; 4,000, they say, being obtained in this way. They give to each man of these a blue coat, whilst those who remain have received red ones...<sup>(9)</sup>.

As the Armada approached, an army to encounter the

enemy was assembled at West Tilbury. A 'regiment' of 1,000 London Trained Bandsmen, under the command of Martin Bond, was ordered to be at Tilbury by 26 July<sup>(10)</sup>; but the Queen's General, the Earl of Leicester, held them in contempt, as they refused to serve under the captains who had followed him from the Low Countries:

'For your Londoners, I see their service will be little, except they have their own captains, and, having them, I look for none at all by them when we shall meet the enemy'<sup>(11)</sup>.

The remainder of the London Trained Bands were to serve in the army being assembled in the city 'to defend her Majesty's person'; but it is unlikely that they were ever called upon to leave their homes except for training sessions.

The news that the Armada had been defeated did not come suddenly. Even the captains in the English fleet expected more fighting after the battle off Gravelines, and the general mood was that the chance to decisively defeat the Spanish had been missed. Slowly it was realised that the weather and the battle-damage they had suffered would prevent the return of the Spanish ships; and the camp at Tilbury was reduced in numbers. Living close to the camp, the Londoners were among the first to be dismissed, as they could quickly be called back again at need. Sir John Norris, an experienced soldier, is said to have been horrified by the prospect of the Tilbury army having to fight the invading veterans of Parma's grim Army of Flanders; but the London Trained Bands were undoubtedly among the best-trained and best-equipped troops available to the Crown.

### After the Armada

Philip II of Spain was to despatch three more invasion forces against England, but incompetence and the weather were to defeat them all. The London Trained Bands maintained their readi-

ness, and during the invasion scare of 1599 they assembled 1,150 pikemen and 2,225 calivermen under 15 captains<sup>(12)</sup>. Peace with Spain came when James I ascended the throne; and the City Trained Bands took on a more ceremonial rôle, as when they turned out in yellow fustian uniforms and red scarves to greet the King of Denmark in 1606<sup>(13)</sup>. The London Trained Bands were to march to war again; but that is a subject for a future article. MI

#### Notes:

- (1) H.M.C. Foljambe Papers f138(2), 11 March 1587 (8), the court at Greenwich — the Privy Council to Sir George Bonde, Lord Mayor of London.
- (2) 'An Order to be observed for the Marshalling of the City of London into a true Form of Discipline, to be used in time of Occasion.' *Strype's Stow* (London, 1720)
- (3) Acts of the Privy Council, 15 June 1588.
- (4) A.P.C. June 1588. Letter to Sir Henry Lee, Master of the Armoury.
- (5) Thomson, George Malcolm, *Sir Francis Drake* (London, 1972)
- (6) Bruce, John, 'The Quota of troops furnished by the City of London to Repel the Spanish Armada in the reign of Queen Elizabeth', in 'Report on the arrangements which were made, for the Internal defence of these Kingdoms, when Spain, by its Armada, projected the Invasion and Conquest of England; and application of the wise Proceedings of our Ancestors, to the present crisis of public safety.'
- (7) Calendar of Spanish Letters. Advices from London f254, 1 April 1588.
- (8) Sir John Norris, a veteran of the wars in the Low Countries, had been despatched to inspect the defence arrangements of the maritime counties of Dorset, Hampshire and Kent.
- (9) Calendar of Spanish Letters. Advices f298, 17 May 1588.
- (10) Robinson, Richard, *A Survey or Muster of the Armed and Trayned Companies in London 1588 and 1599* (London, 1600)
- (11) Leicester to Walsingham, 7 August 1588 (old style), in *History of the United Netherlands*, Vol. II, by J.L. Motley (2nd edition, London, 1869)
- (12) Robinson, *ibid*
- (13) Carman, W.Y., *British Military Uniforms...* (London, 1957)
- (14) 'On a Tudor Parade Ground, The Captain's Handbook of Henry Barrett, 1562' by J.R. Hale; Society for Renaissance Studies, *Occasional Papers No. 5* (London, 1978)
- (15) 'An advice to a Captaine of A Companie of sotemen howe to frame and instruct his companie'; Harleian MSS 703.
- (16) The Privy Council to the Earl of Derby, 16 4 1586; Historical Manuscript Commission, Foljambe Papers f88b.

## REVIEWS

'British Infantry of the Napoleonic Wars' by P.J. Haythornthwaite; Arms & Armour Press; 104pp, 142 b/w ill., 24 col. ill.; £12.95

This excellent volume deals with? aspects of the only military force never to have suffered a major defeat at the hands of Napoleon. The author is a well-known historical consultant, a major contributor to this magazine, and the author of many books on similar subjects.

The work is split into three main sections. The first is an appraisal of the infantry: its organisation, recruitment, daily life, tactics, and so forth. The second is devoted to the evolution of uniform between 1793 and the introduction of the shako in 1800-1801; the third, with uniform between that point and 1815. The author has an economic, authoritative style, and the short introductory section cleverly packs into a limited space a very clear word-picture of the British infantry during the 22 years of the conflict.

The remaining 95pp are devoted to the illustration of uniforms, shakos, shoulder belt plates, weapons and equipment, mainly from contemporary prints but including some clear photos of surviving relics. Many prints will be recognised as old friends; but there are several important illustrations which are new to the reviewer or have not before been generally available. Most importantly, each print and photograph is given an extended caption which not only points up the colours but underlines and identifies all the curious and obscure anomalies which might otherwise go unnoticed.

Among the particularly interesting prints are a grenadier of the 2nd Foot in the Indies during the Maroon Wars, showing a unique cap plate; Denis Dighton's Sgt. Masterson of the 87th at Barrosa; Walker's recruiting party of the 33rd in Yorkshire; Edridge's portrait of a field officer of the 2nd Foot Guards with the short-lived gold lace binding to the 1812 shako; the almost twin portraits of flank company officers of the 20th; an excellent grenadier corporal of the 3rd Foot Guards in full marching order from Vernet; several Gentry prints, and Finart's grenadier of the 92nd.

Eighteen photographs are in colour, and include six subjects by Daye, two by Rowlandson, three by Goddard and five by Hamilton Smith, each with its own long caption. Some of the black and white photographs come from Wallis & Wallis, courtesy of the always cooperative Mr. Roy Butler.

The book ends with a long Appendix giving the facing colours and lace of all the regiments culled from the 1802 regulations, the 1803 De Bosset chart, and Hamilton Smith, 1812. In all, this book is considered a first-class read, and is heartily recommended. DSVF

'The British Light Infantry Arm, c.1790-1815', by David Gates; B.T. Batsford Ltd; 212pp; 20 ill.; £17.95

Sir Arthur Bryant considered Wellington's Light Division to be 'the crown and exemplar' of the Peninsular army. From its ranks, one of its regiments, the 52nd Light Infantry, went on to deliver the *coup de grace* to the Imperial Guard at Waterloo; another, the 95th Rifles, received a distinction never accorded before or since to an infantry regiment, of being removed from the Line and re-titled the Rifle Brigade for its consistently high performance in the Napoleonic War. By 1815 the reputation of British light infantrymen and riflemen stood higher than comparable troops of any other nation. Yet at the start of the French Revolutionary War in 1793 the British Army, despite its use of light troops in the Seven Years War and the War of Independence, was so short of that arm compared with other European armies, particularly the French, that it could only rely on émigré units.

How this transformation was effected is the subject of Dr. Gates' carefully researched and fascinating book which, drawing almost entirely on primary sources, not only corrects a number of misconceptions and received ideas, but produces much that is fresh, and gives due credit to officers, several of them foreigners, whose services to British light infantry have hitherto been largely overlooked.

By conducting such a thorough examination into how light troops were trained and how this training was put into practice, Dr. Gates affords an insight into a neglected area, the actual functioning in battle of a battalion down to the individual in the ranks: how they moved, in what formations, how they fired, how controlled and so on. He also usefully explains the differences between light infantry and riflemen in their employment, dress and weapons — which, incidentally, may correct some illusions about their forbears which this reviewer has encountered among members of today's Light Infantry.

Dr. Gates is particularly interesting about how uncertain was the raising of the first entirely rifle-armed, green-jacketed regiment, the 95th, in 1800, and the difficulties encountered by those who saw it as a military necessity. He also explains how ahead of their time were some of the early trainers of light troops in perceiving that more efficient, thinking soldiers could be best produced by a humane discipline based on prevention, rather than punishment, of crime.

There are a few misprints in this otherwise admirable book, e.g. on p.77 'battalion' is wrongly spelled, 'seving' on p.93, twice Wellington's ducal title is deprived of a capital 'D', and an early colonel of the 1/60th was

the Swiss, Henri Bouquet, not 'Boquet'. Uniform experts may be confused by Dr. Gates' use of 'helmets' and 'tunics' instead of 'shakos' and 'jackets'. There is some repetition: for instance, we learn several times that Baron de Rottenburg formed the 5/60th, and that the lessons of the 1799 Holland expedition were 'painful'. The frequent use of the phrases 'petite guerre', 'guerre des postes', sometimes 'kleiner Krieg', may be found irksome by less academic readers. Given the title on the jacket, it is a pity that the jacket picture — not one of Simkin's best — though allegedly depicting the 43rd and 52nd Light Infantry at Busaco in 1810, in fact shows a Foot regiment's centre companies, who are wearing a shako not even approved until 1812 and then not worn by the Light Infantry!

Such minor errors do not detract from the book's many merits. For anyone interested in the period, the British infantry's part therein, and the tactics and weapons used, it is essential reading. Nor should it be overlooked by the serving soldier, for whom Dr. Gates' final chapter suggests some lessons for today that can be derived from this thorough and absorbing account of some of our finest soldiers of the past. **MJB**

**'Death Valley'** by Keith William Nolan; Costello Publishers (in USA, Presidio Press); 324pp; maps; £16.95

Sub-titled 'The Summer Offensive, I Corps, August 1969', this is the third of Nolan's Vietnam campaign histories (the others dealt with Hue, and 'Lamson 719'). It tells of the fighting in the Hiep Duc and Song Chang Valleys on the borders of Quang Nam and Quang Tin provinces, the main formations involved being the 7th Marines and the 196th Bde. of the Americal Division. The author's method is straightforward chronological narrative, fleshed out with many personal anecdotes and descriptions. He is no English stylist; but the relentless accumulation of small-scale detail has a numbingly powerful effect.

Nolan strives not to be judgemental, but his material speaks for itself. The Marines were at least still capable of successfully mounting a conventional battalion assault which did them credit; but even they were no longer the Marines of 1966-68. With certain very honourable exceptions, the Army brigade emerges as little more than an armed rabble: unwilling conscripts, badly trained, badly led, badly motivated, lacking all discipline, cajoled into action by junior leaders who sometimes seemed afraid of their own men — and therefore, consistently outfought by an enemy who lacked anything approaching the Americans' firepower but had ten times their determination. To blame this sorry picture on the 'grunts' alone would be simplistic, and between the lines of Nolan's book the responsibility of senior ranks is clear to see. This account makes deeply depressing,

but very educational reading. (The maps are too few and not sufficiently detailed for an easy following of the narrative.) **JS**

**'The British Soldier in the 20th Century (4): Light Machine Guns'** by Mike Chappell; Wessex Military Publishing; 24pp, illus. throughout, 4pp colour illus.; p/bk, £3.50

An intriguing departure for a series hitherto devoted to uniform detail, this title does contain a good deal of colour of great interest to the uniform enthusiast; but its main burden is the part played by the Lewis, Hotchkiss and Bren LMGs in the infantry squad and platoon in the two World Wars. Much useful detail on 'who did what, with what' — a well-assembled mixture of illustrated reference on the guns and ancillary equipment, and their tactical use in battle. Recommended. **JS**

**'Eyewitness to Trafalgar'** by Thomas Huskinson; Ellison's Editions, 41 High St., Orwell, Royston, Herts SG8 5QN; 118pp, illus.; p/bk, £10.00 incl. P&P

A numbered edition of 1,000 copies from this enterprising 'mini-publisher' reproduces the memoirs of a young Royal Naval officer from 1800 to 1808, with supporting appendices — a fascinating account of sailing over a wide expanse of the globe, apart from the eponymous battle. This publisher offers a number of other limited editions of memoirs, naval and military, and will supply details against a stamped, self-addressed envelope. Recommended. **JS**

**'The Soldier Who Walked Away'**, ed. Arthur H. Haley; Bullfinch Publications, 245 Hunts Cross Ave., Woolton, Liverpool L25 9ND; 128pp, illus.; £9.95

This book first appeared in 1865 in Edinburgh, but is well worth resurrecting. It is the autobiography of one Andrew Pearson, who from 1797 saw 16 years' service — most of them in the rank of sergeant — with the 61st Foot, in South Africa, India, Egypt, Italy, Portugal and Spain. A man of firm principle, who deeply resented having been kidnapped into the army at the age of 14 but decided to make the best of it, Pearson was finally driven to desert by the tyranny of an officer while campaigning in the Peninsula in 1812. He succeeded in making his way home to England — an extraordinary feat in itself; and, living to the age of 88, he married, raised 11 children, and finally died with the boast that he had never taken 'one farthing of parochial aid.' His account includes many interesting anecdotes of army life and Napoleonic warfare; and his character presents an instructive contrast to that revealed in the memoirs of the other sergeant, and hardened rogue, William Lawrence (see review 'MI' No. 13). Recommended. **MCW**

**'In the King's German Legion: Memoirs of Baron Ompteda'**, ed. Baron Louis v. Ompteda; reprint of 1894 edn. by Ken Trotman

Ltd., Unit 11, 135 Ditton Walk, Cambridge CB5 8QD; 320pp, frontispiece; £25.00

This latest volume in the series of Ken Trotman reprints will be welcomed by those interested in the Napoleonic Wars in general, and in the British and Hanoverian forces in particular. The book concerns Baron Christian Ompteda, perhaps the best-known of the Hanoverian émigrés who served in the King's German Legion, that magnificent corps comprised largely of George III's Hanoverian subjects, following the occupation of Hanover by Napoleon.

It is not a 'memoir' in the conventional sense — for Christian Ompteda did not survive to write his reminiscences — but consists of extracts from his letters, mainly to his brother, and from his journal, edited and expanded by his great-nephew. The editor's (or translator's) style is considerably more florid than normally encountered ('but when at last this noble high-beating heart found rest, he had earned the imperishable reward which was the fulfilment of all his longings...'); but there is great interest in the story.

Christian Ompteda began his military service as an officer in the Hanoverian Guards, as befitting a scion of a noble house, in the Netherlands campaign; very interesting accounts of Famars and Valenciennes are included. Upon the occupation of Hanover he sailed to England as an emigrant officer, his emotions in exile being very similar to those of Europeans who in World War II also came to Britain to continue their fight. Ompteda records the warm welcome accorded the refugees, but sadly compared free Britain with his occupied home: 'Happy is he who has a Fatherland like England!'. A sensitive man, he was perhaps not really fitted for a military career (he suffered mental breakdowns after the 1794-95 campaign and in 1808-09, causing him to leave the Legion until 1812). He played his part with determination, nevertheless, serving in the later Peninsular War and at Waterloo, where his battalion (the 5th Line) was uselessly sacrificed by the ignorance of the Prince of Orange. Resigned to his fate, Ompteda was last seen alone, surrounded by Frenchmen, striking at their shakos with his sword — a tragic end to a most worthy man.

Interesting throughout, the book covers many points of significance, as diverse as Ompteda's covert negotiations on behalf of Britain with Gneisenau in 1811, to comments like that which claims 'eating and drinking are prime articles of faith to the Hanoverian soldier'. References to the KGL are perhaps the most useful, including such surprising facts that in the 1st Line Bn. Ompteda issued an order to the effect that 'no beards were to be worn any more, and that the pioneers and drummers were to shave theirs off'; possibly the only reference to the use of beards by others than pioneers in the British regular forces at this time. Less surprising is the description by a friend of the Ompteda family of the malady.

'cannon fever': 'Every time I come under cannon fire... a nervous shiver affects me, which only goes off after I have got used to the hum of the balls!'

Issued in a limited edition of 300 copies and extremely well bound, even at £25 this represents an excellent investment for the Napoleonic enthusiast. **PJH**

**'London & Liberty: Ensigns of the London Trained Bands'** by Keith Roberts, illus. Les Prince; Partizan Press, 26 Cliffsea Grove, Leigh-on-Sea, Essex; 76pp; p/bk, £3.85 incl. P&P

This book is not the first to seek to reproduce the flags used by London Trained Bands during the Civil War, and indeed other efforts have appeared in the short time since its publication. However, Mr. Roberts presents by far the most complete and detailed examination to date. All the known company ensigns are drawn with meticulous skill by the pen of Les Prince; unlike other less studied efforts these illustrations provide not only the distinguishing regimental symbols, but also their correct positions on the flags, and accurately record their sometimes irregular designs.

Mr. Roberts, whose detailed research into the history of the London Trained Bands is, we understand, to be represented in the pages of a future issue of this magazine, provides much more than a list of flags. The book relates the origins and development of the LTB during the Civil War, giving campaign histories of all the 18 regiments of the City bands, the Trained Bands of the suburbs, and the Auxiliaries of both. Many errors published in earlier accounts are corrected, and much hitherto undiscovered information is revealed. With extensive lists of sources, and appendices detailing officers of various years and a recorded muster of some of the regiments, this book will be of great value to all serious students of the Civil Wars. **JT**

**'AMilitaria'**, ed. Christian Taverniers; New Fashion Media SA, 60 Avenue Louise, B-1050 Brussels, Belgium; 56pp, illus. throughout, average 16pp col. illus.; incl. P&P, £3.00 (UK), \$6.00 (US)

Three further issues of this most interesting magazine-format quarterly are to hand, and the following brief list of their contents indicates the eclectic range of subjects covered in expert, well-illustrated articles: No.3 — US and German flamethrowers, WW2; Italian paratroopers, WW2; French Chantiers de la Jeunesse, WW2; Reichswehr bayonets; French medals, 1857-74; British ATS, WW2; Spanish Blue Division, WW2. No.4 — RAF flying clothing, WW2; Militärverwaltungsbemalte, WW2; French 17th Regt. du Genie, 1923-88; Italian Military Order of Savoy since 1855; Polish paratroopers, WW2; Austro-Hungarian mountain troops, 1914-18; Heer shoulderstraps, 1933-45; uniforms and insignia of the Yugoslav Partisans, WW2. No.5 — Saharan Com-

panies of the Foreign Legion, 1940-63; Italian Co-Belligerent paratroopers, WW2; German S-Mine, WW2; Rumanian Medal for Crusade against Communism, WW2; USAAF insignia, WW2; German gasmasks, WW1; Chantiers de la Jeunesse; Luftwaffe flying clothing, WW2. (In many cases the individual articles deal with narrower and more specific aspects of these subjects.) Even for non-French readers these publications are a mine of useful reference, with their many good photographs. MCW

**'Wayward Legionnaire: A Life in the French Foreign Legion' by James W. Worden; Robert Hale; 208pp; 31 b/w illus.; £11.95**

The reviewer must declare an immediate personal interest, in that Jim Worden, secretary of the British association for Foreign Legion veterans, is a friend. Reviewing his memoir fortunately involves no crisis of conscience: it is a straightforward account, written in a lively and unpretentious style, by an adventurous man who has spent most of his life either in uniform or working as a civilian in far-flung parts of the world. Readers interested in Legion life and operations during the Algerian War, seen from the viewpoint of a private and NCO, will find it honest, hard-hitting, and quite free from self-glorifying 'shoulder-rolling'.

At 36, Jim Worden was much older than most recruits when he signed up in 1959; he had already fought throughout the Second World War in the RAF, completing 94 bomber operations as a rear gunner and, latterly, as a Flying Officer pilot. In the Legion he served with the 2nd Bn., 3rd Foreign Infantry, seeing action in the course of long, exhausting operations in the punishing terrain of the Algerian hinterland. In 1963 he transferred to the 2nd Foreign Parachute Regiment, having succeeded in passing the very demanding parachute course at the age of 40 — an extraordinary achievement in itself.

The author's happy-go-lucky approach to soldiering is evident in his anecdotes of sergeants and officers, respected even if loathed; of bars and brothels; of forced marches and murderous training exercises; of comradeship, and of frighteningly sudden encounters with the hidden enemy. He does not romanticise the reality of this ugly war, but nor does he wallow in it. This is a soldier's account, and entirely convincing.

But Jim Worden is perhaps not quite the hard-faced légionnaire which he depicts. One story sticks in the memory: that of the author, trekking through a beautiful, wild landscape depopulated by a savage war, quietly pausing to sew packets of seeds which he had sent out to him from England, so that something useful might grow in his boot-tracks when he had gone.

The photographs, many of them taken by the author, are a more interesting and original selection than often found in books on this subject. MCW

We have received an unsolicited review from a distinguished authority, which we are pleased to publish:

**'Arms and Armour of the Crusading Era, 1050-1350'** by Dr. David Nicolle; Kraus International Publications, USA; ISBN 0-527-67128-2; 2 vols.; 1,038pp, 1,600+ line drawings, 3 maps; biblio; h/bk, \$225; soon available through Ken Trotman Ltd., Cambridge.

In recent years there has been a demonstrated revival of interest in the history of the medieval period. This has been particularly evident in the number of publications, both scholarly and general, which address the military aspects of the period. This attention has created a demand for up-to-date reference works to serve the needs of varied readerships: historians, art scholars, special interest groups such as medieval enthusiasts, wargamers and modelers, as well as the general public.

Dr. Nicolle is well known to both academic and general readers from his previous efforts on medieval Islamic arms published through *Gladius* and in the *Journal of the Arms and Armour Society*, and several related titles in Osprey's *Men-at-Arms* and *Elite* series. With this, his most recent and ambitious effort, he has prepared an extensive examination of the military equipment, systems, and conduct of the armies of Europe and the Islamic world during the High Middle Ages.

There are two volumes, one of textual matter and one with over 1,600 detailed line drawings, full bibliographies, a dictionary of Western and Islamic terminology, and a complete index. Vol. 1 ('Commentary') opens with an explanatory introduction, notes and acknowledgements, and several political maps of the regions involved. Two pages of line drawings follow, providing an illustrated key to some of the general equipment discussed, and orienting the reader to the materials described and shown.

Each of the next 37 chapters addresses a separate region or power in a well-footnoted essay on the development of military equipment, and the tactical system in which it was employed. Following the essay are numbered descriptive captions to the relevant figures in Vol. 2 ('Illustrations'); this arrangement works well, with no difficulty in cross-referencing picture and text.

The line drawings are well rendered, clean and concise. They represent purely primary-source materials ranging from martial objects to their presentation in a variety of artistic media including graphic arts, sculpture, and other decorative and functional arts. Some, but unfortunately not all of the examples of preserved armour and weaponry shown are accompanied by a reference scale. It is also regrettable that more of the inventory numbers for items in museum collections could not have been furnished. Closing sections include an extensive, categorised bibliography of published and unpublished primary and



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secondary sources, and a complete index.

Dr. Nicolle is to be lauded for his efforts in bringing together an abundance of data and illustrations from a variety of areas, and presenting them in an attractively bound, very high quality format. While there are typographical errors scattered throughout, these are mostly minor irritants attributable to proof-readers rather than to the author. The quality of presentation comes, however, at a very high price. This will no doubt place the set beyond the reach of some of the very readers for whom it is intended, except for those fortunate enough to have access to library copies. Nonetheless, Dr. Nicolle's own professional talents, and those of his colleagues, have made this a first-rate work of great importance, and one that will set the standard for those to come.

Walter J. Karcheski, Jr.  
Curator of Arms & Armor  
Higgins Armory Museum  
Worcester, MA, USA

We have also received:

**'Fiction of the First World War: A Study'** by George Parfitt (Faber & Faber, p/bk, £4.95)  
**'Gunga Din'** (J.M. Dent, £6.95), Kipling's poem in a slim, large-format edition interleaved with naïve colour illustrations by Robert Andrew Parker.  
**'Someone Had Blundered'** by Geoffrey Regan (B.T. Batsford, £14.95), described as 'a historical

survey of military incompetence'.  
**'Mander's March on Rome'** by d'A. Mander (Alan Sutton, £10.95), a memoir of desert warfare and adventures on the run in Italy by a Green Howards officer.

**'Nam'** by Mark Baker (Abacus p/bk, £3.50), the paperback edition of a classic collection of Vietnam veterans' reminiscences.

**'Lost Victories'** by Erich von Manstein (Greenhill, £18.95), a facsimile reprint of the field marshal's memoirs originally published in English in 1958.

**'Tank Warfare'** by Frank Mitchell MC (Spa Books, £15.00), a facsimile reprint of the Great War study published in 1930 by the British commander in the world's first tank-vs.-tank battle.

**'Echo of The Guns'** by Harry Siepmann (Robert Hale, £10.95), the memoirs of a Great War artillery subaltern who served in Egypt, France and Italy; vivid, detailed eye-witness account in diary form.

**'The Underrated Enemy'** by Adrian Stewart (Wm. Kimber, £13.50), a study of Britain's war with Japan, December 1941 to May 1942.

**'Massacre at Tobruk'** by Peter C. Smith (Wm. Kimber, £13.50), an illustrated account of Operation 'Agreement', the disastrous Tobruk raid of September 1942 — still a highly controversial subject.

**'Hell at Fuka'** by R.R. Smith (Wm. Kimber, £9.50), a novel about 25pdr. crews in the Desert War, let down by a truly dreadful piece of dust-jacket artwork.

## Three Scottish Soldiers

On 1 June 1987 two new permanent galleries were opened as part of an expansion of the Scottish United Services Museum, Scotland's National Museum of the Armed Services in Edinburgh Castle. Situated in a prominent 19th-century building overlooking Princes Street, originally built as the garrison hospital in the 1890s, the galleries are the first addition to the SUSM since the 1950s.

**The Story of the Scottish Soldier 1600-1914** is the title of the exhibition which occupies the two main galleries. Smaller areas are to be used for specialist displays; and an exhibition dealing with the history of military music is planned for this year.

In the past the military history of Scotland has been told mostly through the various regiments which have become household names not only in Scotland but throughout the world; this was certainly the case in the existing galleries in the SUSM. It was felt that the time had come for a broad-ranging history of the Scottish soldier. The SUSM, with its unique collection combined with an incomparable site — the Castle is the most visited Ancient Monument in Scotland — was ideal for this purpose. The exhibition which has resulted looks at most aspects of the Scottish soldier from 17th-century mercenaries to 19th-century Rifle Volunteers, and ends with the outbreak of the Great War. It is planned to continue the story in a further exhibition in the near future.

To act as a focal point, the exhibition includes 21 full-length figures each dressed in a complete uniform from the museum's large collection. The lifelike figures have wax hands, and heads with glass eyes and even human hair. Each has a distinctive face, based where possible on an actual likeness of the original wearer of the uniform.

Because many of the

present information on their lives and careers.

One drawback inseparable from this approach is that 19 of the 21 figures are dressed in officers' uniforms. Because an officer had to buy his uniforms they remained his property after retirement or death; and, being of little practical use to a civilian, they were sometimes packed away in a trunk, often with a healthy amount of camphor, and stored in an attic, to be discovered intact by future genera-

tions. Any deficiencies in the surviving costumes used in the Edinburgh exhibition have been made up either with originals of the correct pattern or with specially-made and exact reproductions.

Other Ranks' uniforms, on the other hand, were either handed in upon discharge, or worn until they fell apart; the discharged soldier was often compelled by circumstances to wear whatever he could. Out-of-date or worn-out OR's uniform items were sometimes cut up to make fatigue clothing, and eventually, cleaning rags. Little now survives from any period; it is, for instance, a scandalous thought that to the best of our knowledge no single example of the uniform coat of an Other Rank of a British Guards or Line Infantry regiment of the Napoleonic period now survives in any published collection in the United Kingdom.

...

Starting in the next issue of 'MI', Allan L. Carswell, a Museum Assistant at the SUSM, will contribute an occasional series of three articles which examine in detail three of the figures in the exhibition. These will be Lt. Col. John Dalgleish of the 21st Regiment of Foot (Royal North British Fuzileers), 1797, two of whose uniforms survive, spanning the 1780s and 1790s; a private of the 93rd (Highland) Regiment of about 1854; and Capt. Frederick Phillips of the 2nd (Royal North British) Dragoons, also c.1854. The accompanying colour photograph, showing in detail the collar, lapel and epaulette of Lt. Col. Dalgleish's uniform of the 1790s, gives some idea of the superb quality of the surviving uniforms which we shall be illustrating, wherever possible in colour.



# Bullpups and Bearskins: SA80 On Parade

E.W.W. FOWLER

The Queen's Birthday Parade on 11 June 1988 was the first Trooping of the Colour in which the men of the Household Division of the British Army carried their new 5.56mm L24A1 rifle. The ultra-modern shape of this squat-looking weapon, no less than the unfamiliar drill movements which its length and protruberances require, made a striking impression against the sea of scarlet tunics and black bearskins marching and countermarching over Horseguards Parade in perfectly choreographed patterns reminiscent of 18th and 19th-century warfare.

The rifle had in fact made its public debut when the Royal Marines mounted guard at Buckingham Palace in June 1986. Prior to this appearance there had been considerable discussion about the arms drill that should be adopted for a compact, 78.5cm-long weapon with no true butt. It was apparently felt that the solution adopted

by the French Army to the problems raised by its adoption of the rather similar FAMAS rifle — slinging the rifle across the chest in a kind of 'high port' position — had an unacceptably Eastern European look, and this was rejected.

In the end a compromise drill was adopted, which includes the 'slope arms' — a

movement which went out with the old Lee-Enfield — and on either shoulder, too, according to circumstances. The Guards rejected a 'stand easy' with the rifle held horizontally across the thighs at full arm stretch: a startling new posture in British drill. One problem has been the weapon's  $\times 4$  SUSAT sight which, though highly effective in use, requires a fabric cover to 'fair in' its lumps and bumps to prevent them snagging on clothing during ceremonial parades.

## RIFLES FOR THE 21st CENTURY

The rifle — L24A1 to the Army, but universally known as 'SA80'<sup>(1)</sup> — was developed for the British Army in competition for a new NATO rifle. It is a conventional gas-operated rifle, locked by a rotating bolt engaging in lugs behind the breech and carried in a

machined carrier running on two guide rods; a third rod controls the return spring. The gas regulator has three positions: normal, a large opening for adverse conditions, and a closed position for firing 21mm muzzle-launched grenades.

**Small calibre ammunition**  
At the end of the NATO trials there was agreement only on the calibre; and even on that point, the West Germans have plans for a revolutionary small calibre caseless — i.e. self-consuming — round.

The 5.56mm calibre had been adopted by the US Army during the Vietnam War, and they had extensive experience with the Colt-designed ArniaLite which as a military weapon became the M16 and later M16A1. However, the M193 ammunition used in SE Asia was felt to be insufficiently powerful for Europe. During the Falklands War in 1982 British soldiers and Royal Marines of special

(1) Happily the Royal Ordnance, Enfield name for it — 'Endeavour' — has quietly died, it seems to have been a particularly meaningless attempt to preserve the tradition of 'en' names



### Left:

Two soldiers of the 1st Bn., The Queen's Regiment in South Armagh, Northern Ireland in August 1987. The standing soldier has the Light Support Weapon, recognisable by its longer barrel with metal grips and bipod. The LSW and Individual Weapon — as SA80 is more correctly designated — have 80 per cent commonality of parts and, more importantly, share the same 30-round magazines.



(Army Information Services, Northern Ireland)

### Above:

Men of the 1st Bn., Grenadier Guards deploy from their GKN 'Warrior' Infantry Combat Vehicle. SA80 is an ideal weapon in the confined space of an armoured vehicle; and is part of a larger package of new equipment — like 'Warrior' itself — now entering British Army service. (MoD PR)

units issued with the M16/Armalite reported themselves unhappy with its stopping-power. NATO Comparative Small Arms Trials favoured the Belgian FN-designed SS109 round. Though expensive, this is very powerful, and out-performs the NATO 7.62mm round at long ranges. This is achieved by a mix of rifling twist (six grooves, one turn in 180m); propellant; and most notably by a bullet which has a steel penetrator in the tip. In effect, this gives a degree of armour penetration; and at ranges where a NATO 7.62mm round glances off a standard NATO helmet, the SS109 selected for SA80 punches a neat hole.

During the trials the British had favoured an even smaller high-velocity 4.85mm calibre, allowing the soldier to carry more ammunition for the same weight, and to put down a greater volume of fire on the target. However, the adoption of 5.56mm has allowed standardisation of ammunition throughout NATO, and the use of the M16A1's 30-round magazine.

The principle is already widely accepted. The French have adopted 5.56mm with their FAMAS; the Austrians have the successful AUG family, the Belgians the FNC, which has been adopted by the Swedes, the Israelis the GALIL, the Finns the Valmet, the West Ger-

mans the HK33, and the Italians the Beretta AR70/90.

The heavy-barrel squad automatic weapon which uses common parts from the rifle is also a feature of 5.56mm weapons. A common magazine means that MG link does not have to be carried, and soldiers can provide the gun with ammunition from their own stocks at need.

### Bullpups

Like the FAMAS, the SA80 is unusual in being a 'bullpup' design: the magazine housing is to the rear of the working parts. This means that the rifle is very compact, while still having a barrel long enough for accuracy at normal battlefield ranges of 100 to 300 metres.

The SA80 resembles the 7mm EM1 and EM2 self-loading rifles developed by the Royal Ordnance Factory at Enfield back in the 1950s to replace the .303 in. No.4 rifle. These pioneering weapons were abandoned when pressure from the USA persuaded the then Prime Minister, Winston Churchill, to adopt the 7.62mm calibre then in use by other NATO nations. The SA80's design recalls the EM's small-calibre bullpup concept, though there are many detail differences.

SA80 was envisaged as a compact weapon which would replace both the Self-Loading Rifle and the Sub-Machine Gun. The L86A1

Light Support Weapon (LSW) is also part of the 'family', and is in effect a longer-barrelled SA80 with a bipod, which replaces the GPMG in the light rôle in the infantry section. It uses the common 30-round magazine and SUSAT sight, though the longer barrel and greater muzzle velocity (970 m/s compared with 940 m/s) makes it accurate to 800 metres. The advantage of this design is that there is 80 per cent commonality of parts and magazines. The LSW also allows the section to work as two 'bricks' each with an LSW, rather than as a separate gun group and rifle group.

### USING THE SA80

For a soldier familiar with the Self-Loading Rifle the SA80 can take some getting used to. The cocking handle is on the right, which means that he has to tilt the rifle over to its left in order to cock it with the left hand while keeping his right hand on the pistol grip; it also means that he has to take the weapon off the shoulder, the bullpup design placing the cocking handle well to the rear. The weapon cannot be fired naturally — from the left shoulder — by left-handed men, since the ejection port is near the rear of the rifle and would be blocked by the soldier's face.

Compact it may be, but the SA80 is heavier than the equivalent 5.56mm weapons in service round the world. Since the working parts are in the rear the rifle feels butt-heavy, though this can be compensated for by seating it firmly into the shoulder and getting a good grip on the stock. The low recoil energy of the round makes the rifle quite comfortable to fire compared with the SLR.

When firing the LSW in the prone position there is a butt-strap which rests on the shoulder and a rear grip for the left hand. Anyone who is used to firing the LMG or GPMG in the light rôle finds it difficult not to hold the butt of the LSW into the shoulder with the left hand and cock with the right hand. However, like the SA80, the LSW is designed to be cocked with the left hand while being tilted with the right — the bipod makes this easier, allowing the weapon to cant to the left when it is resting on the ground. Though heavier than the SLR (5.4kg, as against 4.3kg) the LSW has something of the feel of that weapon. The major difference is the much lighter recoil — with only 4 joules of recoil energy, as compared with the SLR's 17 joules, it can comfortably be fired from the shoulder as well as from the hip, which allows the gunner to use it in the assault for accurate suppressive fire.

The safety catch on both the SA80 and LSW is a button above the trigger group which can be pushed without the hand leaving the pistol grip. The magazine release catch is on the left side of the weapon. The SA80 can fire either single-shot or automatic; the change lever is behind the magazine on the left side. For anyone used to the combined safety catch and change lever of the SLR and LMG, switching fire or operating the safety takes a moment's thought.

A sling with Fastex buckles has been devised, which allows the soldier to sling the rifle in a number of positions which leave his hands free to operate equipment or hold ski-sticks, while giving quick access to the weapon. The



Rifleman of the 1st Queen's in South Armagh. This was the first of two 'roulement' battalions — units serving 18-month tours in Northern Ireland — to be equipped

with SA80 while in Ulster. The weapon pictured here has a Colt Industries magazine. (Army Information Services, Northern Ireland)

LSW can be fired from the hip in the assault by a quick adjustment of the buckles.

Other features include a bayonet/scabbard design which has taken the wire-cutting combat knife developed by the Soviet Army for the AK family of weapons, and improved it. The SA80 bayonet can cut wire, but also includes a hacksaw in the scabbard, and a sharpening stone. The blade and handle are cast in one piece and are therefore very strong; the only disadvantage is that the metal handle is not insulated against electricity, unlike the

Soviet type with its thick rubber grip. A quick-release catch allows the bayonet scabbard to be released from the webbing for use in the wire-cutting mode, but as this seems to have shown itself prone to releasing itself of its own accord it is now stowed in a cordura sheath on the PLCE belt.

### Criticisms

During trials and since introduction to service there have been some other problems with SA80. People who ask why any problems should arise after a weapon has

entered service are being less than realistic; and should perhaps recall the men who died in Vietnam trying to clear their jammed M16s — a rifle which had been billed as a 'wonder weapon' which did not need cleaning. In moments of stress or thoughtlessness the average soldier can mishandle weapons in ways unimaginable by even the most diligent trials and development teams.

In the SA80 there were problems with the safety catch if the rifle was dropped on its muzzle(!). The maga-

zine catch was weak, and fully-loaded magazines would fall off if the left side of the rifle was banged against the soldier's chest.

There has been some comment on the tracer ammunition which, unlike 7.62mm NATO, lights up quite close to the firer. While this may carry a risk of his location by the enemy, it does mean that well-concealed targets at close range can be indicated to a squad with the order 'Watch my tracer'. The LSW barrel was reported to overheat after sustained use. Finally, the plastic of the cheek-piece had a nasty way of turning sticky when it came into contact with insect repellent.

All these problems have been addressed in a programme of modifications. The weapon has had its critics; but soldiers are notoriously conservative (as witness the 16th-century controversy over the wildly radical decision to phase out longbows in favour of firearms for British foot-soldiers); and the author can recall, as a schoolboy, hearing the debates in the early 1960s



Above

'Shorty', the carbine version of SA80. The lighter coloured parts are in olive plastic. The forward pistol grip is similar to the rear grip of the LSW version, and the protected sleeve may act as a compensator. If the weapon is used as a 'trench broom' the firer has to hold it slightly forward and clear of the body so that the cocking handle and ejection port are not blocked by his right arm. (Royal Ordnance plc)



Centre:

The private-venture 40mm grenade launcher version of SA80. Though this is rather heavy, and the plastic stock feels bulky, it would be a useful addition to a section's firepower. The trigger for the grenade launcher is just in front of the rifle trigger. (Royal Ordnance plc)



Right:

The grenade launcher with breech swing open and grenade loaded. (Royal Ordnance plc)



**Above left:**

Arms drill for the SA80 finally evolved in summer 1987 at RMA Sandhurst, the Guards Depot, and 2nd Bn. Coldstream Guards. The conventional 'Present Arms' position would not have been possible if the suggested 'slung across the chest' position had been adopted for parade drill; and in that position it was felt that the fixed bayonet would have been dangerous in close-order drill. (Guards Magazine)

**Centre:**

'Attention'; the 'Stand at Ease' is the same, but with parted legs. (Guards Magazine)

**Above right:**

It was found during trials that, at 4.62kg with sight and empty magazine, the 'in-the-shoulder' or 'Attention' grip was too tiring for lengthy parades; there were cases of locked arms and numbed fingers. The 'Slope Arms' was therefore resurrected — here, the ceremonial left shoulder position, but a drill for 'Change Arms' allows the rifle to be shifted to the other shoulder on the march if necessary. The body takes much of the weight, and each arm can be rested in turn. (Guards Magazine).

**Right:**

Three British Army rifles spanning 45 years: the No.4, SLR, and SA80. The suggestion that obsolete rifles should be retained for purely ceremonial purposes, to ease the drill problems, is rejected on two main grounds. Firstly, however remote the possibility that they might have to use it, Guardsmen must carry a weapon on which they have been trained. Secondly, an obsolete 'ceremonial only' weapon would have to be stored and cleaned in large numbers, sufficient for at least battalions. (Guards Magazine)

**Sights**

The rifle has an 'iron sight' carrying handle for troops who are not issued with the SUSAT sight. The low recoil removes the tendency to be 'gun shy' among inexperienced soldiers, and so helps accuracy. With the SUSAT sight fitted it is hard to miss, and good scores have been achieved by recruits and novices. Royal Ordnance state that 75 per cent of men issued with SA80 qualify to marksman standard, and there is a first-round accuracy of better than 96 per cent at 300 metres. The sight not only magnifies the target, but also enhances visibility in marginal light conditions. The arrow in the sight points downwards from the top, and thus does not obscure the target like the earlier SUIT sight on the SLR.

A night sight, with the commercial name 'Kite', has been developed by Pilkingtons for the SA80, fitting on to the mounting rails which normally take the

SUSAT; this is an image-intensifying sight using light composite materials to save weight. It complements the weapon perfectly, and by using it at night it is possible to hit small targets at ranges of over 600 metres. As a night sight it allows the user to penetrate the shadows under trees or other cover which normally offer good concealment even on clear moonlit nights. This second-generation sight will not 'bloom out' when flares or white light are encountered in action. An adjustable graticule can be dimmed or brightened to suit conditions. With  $\times 4$  magnification and a  $9^\circ$  field of view, 'Kite' is powered by two standard 1.5v AA batteries, which give up to 60 hours of continuous operation.

'Kite' can be used in daylight if a rubber filter-cover is fitted. This has two small holes, which allow enough light to penetrate to operate the sight; these are coded on the 'instant camera' principle, with symbols of a cloud and a



sun, to guide the user in selecting the setting. The effectiveness of 'Kite', unarguable in the case of SA80, becomes even more impressive when it is fitted to the LSW.

## DEVELOPMENTS

Once the British Army had agreed on the two basic weapons, Royal Ordnance plc (now part of British Aerospace as a 'privatised' company) looked at commercial exploitation of the design. At the British Army Equipment Exhibition in June 1988 they showed three variants: a silenced version, a carbine, and a 40mm grenade launcher.

The silenced weapon

(strictly, 'suppressed', since it uses standard 5.56mm ammunition and so has a high-velocity 'crack' when fired) is produced by AE List and Royal Ordnance. List have a 'high tech' and a 'low tech' silencer, SA80 being fitted with the latter.

The carbine weighs 4.7kg with SUSAT sight and 30-round magazine, and is 55.6cm long. Interestingly, it boasts a performance similar to that of SA80 up to 200 metres. It has not been given a name by RO, but is known unofficially as 'Shorty'. It is currently being trialled by the Royal Armoured Corps at Bovington, Dorset; RO see it as a suitable weapon for AFV crews and for covert opera-

tions. In the AFV rôle two per turret would give the crew local firepower; with the same proportions as the SMG, it offers ammunition far more powerful than the SMG's 9mm round. The shortened barrel has a forward pistol grip which also acts as a compensator. The only adverse feature is that the reciprocating cocking handle — a feature required by MoD to allow soldiers to push the bolt forward manually — prevents the weapon being used close to the body like many conventional sub-machine guns. It will take the 'Kite' night sight, and so has considerable potential if fitted with the suppressor for covert operations.

The 40mm grenade launcher, known by the trade name 'Encore', is a fairly heavy and bulky weapon, but can be fitted quickly to SA80 without special tools. It is loaded by hinging the barrel sideways; the safety catch and trigger require two positive movements, which prevent accidental operation. The short barrel may reduce the range, and a tangent sight has yet to be produced; however, this private venture operation by RO shows the versatility of their design team and the potential of the weapon.

The 'Ensign' Cadet Rifle was part of the original SA80 family; a self-loading, single-shot weapon with 'iron sights', it is issued only to cadet forces. It has many common parts with SA80, but can be adapted to fire .22 in. training ammunition. In many ways it is a useful introduction to SA80, though the cocking handle is very different.

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The SA80 marks a change in a number of the traditions of the British Army. It is the first weapon with a fully-automatic capability to be issued to the British line infantryman as standard — traditionally this class of weapon has been regarded with suspicion in an army which has always emphasised individual marksmanship over volume of fire. It is the last weapon to be designed and built at the Enfield factory. Royal Ordnance have now concentrated their operations at Nottingham, and the first rifles are being assembled there. Under new management the weapon is being mass-produced, using many of the techniques normally associated with the automotive industry. Royal Ordnance are hoping to sell the SA80 family to foreign buyers, and Egypt, Botswana and Malaysia are suggested as potential customers. **MI**

*Men of 2nd Bn. Scots Guards during the Queen's Birthday Parade, 11 June 1988.*

### Acknowledgements:

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## Kiffin Yates Rockwell

MARTIN WINDROW

Paintings by RICHARD HOOK

Kiffin Yates Rockwell, the first American pilot to shoot down an enemy aircraft, was born on 20 September 1892 in Newport, Tennessee. Both his grandfathers had fought for the Confederacy; and the boy was so stirred by the tales told him by his maternal grandfather, Enoch Shaw Ayres, that he determined from an early age to be a soldier. His father died when he was an infant, and he spent much time on the Ayres plantation in South Carolina. Volatile and fearless, he excelled in horsemanship and field sports.

He was 14 years old when the Rockwells moved to Asheville, NC; in 1908 he entered the Virginia Military Academy. The following year he was appointed to the US Naval Academy, Annapolis; but he subsequently resigned the appointment, and followed his brother Paul to Washington and Lee University. In 1912 he travelled to the West Coast, and for a time ran a San Francisco advertising agency. In January 1914 he joined Paul in Atlanta, where they lived on West Peachtree Street.

The outbreak of war in Europe seemed to offer the opportunity for action and high deeds; he travelled at once to New York, and, with

his brother Paul, sailed for Europe. With a number of other American idealists and adventurers the young Rockwells enlisted in the French Foreign Legion at Pérignon Barracks, Toulouse, in September. By claiming military experience with the Mexican Army the brothers obtained a posting to the new 2<sup>nd</sup> Régiment de Marche du 2<sup>nd</sup> Régiment Étrangère, serving with Bataillon C — a unit made up of 50 per cent veteran légionnaires from North Africa, 50 per cent volunteers who managed to satisfy the most casual enquiries as to military experience. After brief training the unit left for the front on 30 September.

The 2/2<sup>nd</sup> RE was assigned, during two weeks at Mailly-le-Camp staging area, to the 36th (Moroccan) Division; and on 18 October left Mailly for the front near Craonne, about 20 miles north-west of Rheims. Taking over the crude trenches of the 218th RI, the raw légionnaires began an increasingly miserable winter of rain, cold, enemy shellfire and raids, but did not see action in any major set-piece operations. A trickle of losses thinned the American contingent; Paul A. Rockwell, wounded in the

shoulder, went to hospital with inflammatory rheumatism which eventually led to a medical discharge. Missing his brother and other comrades in a unit of foreigners who were never particularly welcoming, Kiffin transferred on 18 March 1915 to the sister regiment, 2/1<sup>st</sup> RE.

Early in May the regiment entrained for Artois; and there, on 9 May, Kiffin took part in the epic assault on the 'Ouvrages Blancs' at Hill 140. Crossing some 3,000 yards of open ground under fire, the Legion regiment took its objectives at La Targette and Neuville-St Vaast, but at fearful cost. Of some 4,000 in the regiment Col. Pein, 49 other officers and 1,889 men fell that day. Pinned down in a shellhole that afternoon, Kiffin Rockwell made a dash for new cover and took a machine gun bullet high in his right thigh. He dragged himself off the field, and subsequently hobbled and hitchhiked to a rear dressing station. His wound went untreated for four days; but he had escaped bone damage, and — miraculously — gangrene did not set in. Hospitalised at Rennes, Kiffin made a good recovery.

### L'ESCADRILLE AMÉRICAINE

In September 1915 Kiffin was one of a number of American volunteers who were granted transfer to the *Service d'Aviation*, undergoing pilot training the following month. On 20 April 1916 — largely as the result of the volunteer Norman Prince's tireless battles

Rockwell wearing a huge fur 'warm-up' coat and fur-trimmed helmet. Since the background is a Nieuport 11, and since he is clean-shaven, this photograph presumably dates from between 13 and 24 May 1916. (Paul A. Rockwell Collection, courtesy George H. Williams)

(1) The squadron was not named 'Escadrille Lafayette' until 2 Dec. 1916, the name being suggested by the French ambassador to Washington. US Secretary of State Robert Lansing had asked that the style 'Escadrille Américaine' be dropped, as it was causing difficulties between the non-belligerent USA and Germany.

with French bureaucracy — the French air force formally took on strength *Escadrille N.124*, widely though unofficially known as the 'Escadrille Américaine', and consisting of a number of American junior NCO pilots under a French commander, Capt. Georges Thénault, and executive officer, Lt. De Laage<sup>(1)</sup>. Kiffin Rockwell was among the first batch of pilots to arrive at the field at Luxeuil-les-Bains, a peaceful spa town in Haute-Saône.

Though the private rooms and hot running water were idyllic after the trenches, the absence of the squadron's aircraft was frustrating. Six Nieuport 11 'Bébé' single-seat biplanes arrived in kit form at last, and the first patrol was flown on 13 May. On the night of 17 May German aircraft bombed the field, killing four mechanics and wounding six. On the morning of the 18th Kiffin took off alone, crossing the lines north-west of Mulhouse. He was turning for home with a balky engine when he spotted a German two-seater 2,000ft. below. The diving Nieuport took several hits, but Kiffin held his fire until he was within 100yds.; he killed or disabled both pilot and gunner with a single four-round burst from his overwing Lewis, and watched the enemy aircraft fall out of control and crash. The first 'kill' by an American pilot, and by the squadron, was confirmed by ground observers. Capt. Thénault recommended Kiffin for the *Médaille Militaire*; and his brother Paul, now a *Chicago Daily News* correspondent in Paris, sent him a priceless bottle of 80-year-old Bourbon.

The following two months saw the squadron heavily engaged over the Verdun front, flying from Behonne; but though activity was constant, confirmed victories came slowly. 'Kills' were credited only with confirmation by ground observers — hard to secure when fighting, as was normally the case, behind German lines. Air combat in mid-1916 still consisted largely of efforts by



both sides to shoot down enemy reconnaissance and bomber two-seaters, and to protect their own. This naturally led to small dog-fights between hunters and escorting or ambushing single-seaters — on the German side, usually Fokker monoplanes. The two-seaters themselves were formidable opponents, however; and the rather undisciplined American pilots, who tended to charge straight at anything bearing a black cross, suffered frequent damage and some losses.

The Americans were supposed to fly two patrols daily, but averaged many more unofficial flights. They saw much action, often at a numerical disadvantage in brief, whirling, unexpected encounters. (In all, Kiffin Rockwell is thought to have fought in more than 70 combats in four months.) On 24 May, in a chaotic scrap with 12 two-seaters, he took bullet and windscreen fragments in the lower face. He survived the Fokker ambushes without more serious injury, however; and on 1 July was invested with his *Médaille*, and the stripes of a sergeant.

The squadron recorded no 'kills' for three weeks thereafter; but their 'dry' spell was broken on 21 July by no less a pilot than the legendary Lt. Charles Nungesser, who had decided to spend one of his many periods of sick leave with the Americans, and who scored his tenth and the squadron's fourth victory while flying with the volunteers. Two days later Bert Hall — a notorious liar, cheat, and eventual deserter — got a Fokker, confirmed by ground observers. On 27 July, Rockwell and De Laage shot down a two-seater together, and 15 minutes later Rockwell sent down a second, but could not get confirmation. On 9 September, when the squadron was packed to leave Behonne, Rockwell went up alone and shot down a two-seater (confirmed), eluding two vengeful Fokkers. He was recommended for promotion to *sous-lieutenant* by Thénault.



Rockwell during the Verdun fighting, wearing a fur-collared fabric flying overall; he carries a fur-trimmed helmet, and leather gloves with large knitted gauntlet cuffs. (Paul A. Rockwell Collection, courtesy George H. Williams)

make a patrol next morning. That night, drinking with Paul Pavelka (with whom he had shared the shellhole in Artois on 9 May 1915) Rockwell turned pensive; he told Pavelka that if he fell he wished to be buried on the spot, and that the pilots should drink up any money he left.

On the cool, clear morning of 23 September 1916 Kiffin Rockwell and Lufbery took off and flew north-east. Near the Hartsmanwillerkopf hills they dived on a formation of Fokkers. Lufbery's gun jammed almost at once; Rockwell extricated himself and escorted his comrade to Fontaine field, where Lufbery landed. Rockwell then flew back towards the Hartsmanwillerkopf alone, climbing to 10,000ft. Ground observers saw him dive to attack a lone Aviatik two-seater. As usual, he made a long dive on the enemy's tail, holding his fire until the last moment even after the enemy observer opened up at long range. This time he did not fire at all: an artillery officer on the ground saw the Nieuport hurtle past the Aviatik and nose down into a two-mile fall, shedding one wing in the process. The Nieuport crashed a little way inside French lines near Rodern, and was shelled by enemy artillery. Men of a French '75 battery risked their lives to recover Kiffin Rockwell's body; a massive wound in the chest showed that he had died instantly.

He was buried with full honours at Luxeuil on 25 September, and rests there still. His death was the subject of unprecedented press comment, in France and in America. ■

#### Acknowledgements:

The author is grateful for the assistance of Frank W. Bailey, Paul S. Leaman, the late Lt. Col. Paul A. Rockwell, George H. Williams, H. Hugh Wynne and Greg Van Weygarden in researching illustrations for this article.

**Richard Hook's reconstructions** on the back cover show Kiffin Y. Rockwell as: (top left) *Soldat de 2<sup>e</sup> classe*, *Bataillon C, 2<sup>e</sup> Régiment de Marche du 2<sup>e</sup> Régiment Etrangère*, in the front lines near Craonne in December 1914. It is taken from two photographs from the Paul A. Rockwell Collection. Rockwell wears the regulation uniform and equipment of the French infantryman of 1914: 1884 képi with 1912 grey-blue cover; 1877 capote; 1897 trousers; blue calico cravate; 1893 boots and 1913 gaiters; the 1845 belt, 1892 bretelles, and 1888 triple ponches; the 1892 etui-musette, and 1877 litre-capacity bidon. The weapon is the 8mm 1886/93 Lebel bolt-action rifle, with a magazine capacity of eight rounds. The only insignia are the regimental collar écussons on the coat, the cypher '2' being cut from old coat cloth.

(Bottom right) *Sergent, Escadrille N.124, Service d'Aviation; Luxeuil, September 1916*. Rockwell is shown playing with the lion cub mascot 'Whiskey'. The pilots enjoyed a wide latitude in their dress, and group photographs show most in slightly varying versions of the 1915 horizon blue uniform depicted here. Several, including Rockwell, had tunics tailored with open collars, and wore grey or grey-blue civilian shirts and ties or the cravate arranged as a 'stock'. His plain képi has a crown seam, but no piping; the gold chinstrap marks NCO rank. The tunic collar bears the winged, five-point star badge of the Air Service. Note the ribbons of his *Médaille Militaire* and *Croix de Guerre*; by the time of his death the ribbon of the latter, in its full presentation, bore four palms and one star marking his five citations. The American eagle breast-pin, of which perhaps only seven existed, was privately ordered from a Paris silversmith by the original pilots of N.124 in April (see Dr. James J. Parks, *Cross & Cockade Journal* (US), Vol.15, No.4 Winter 1974). In the known photographs Rockwell does not wear the French pilot's wreathed eagle qualification badge on the right breast. A photo apparently taken in Paris in September shows a 'No.1' tunic with standing collar and nine front buttons; no rank insignia are worn, and we assume that Rockwell, like some other N.124 pilots, took advantage in this way of their slightly anomalous position within the French forces. His substantive rank of sergeant should have been marked by two 35mm gold lace diagonals at the top of each cuff. Officers'-style leggings and boots were common among the pilots. Clean-shaven when he joined the unit, Rockwell seems to have grown a small moustache following face injuries suffered in the dog-fight of 24 May.

# Kiffin Y. Rockwell

Soldat 2<sup>e</sup> cl., 2/2<sup>e</sup> RE;  
Craonne, Dec. 1914



Sergent, N.124;  
Luxeuil, Sept. 1916